REVIEW OF HYDROGEOLOGIC INVESTIGATIONS
AT THE J.F. QUEENY PLANT,
MONSANTO CHEMICAL COMPANY,
ST. LOUIS, MISSOURI

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Geraghty & Miller, Inc. Ground-Water Consultants 125 East Bethpage Road Plainview, New York 11803



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A. Geologic Logs and Well Construction Details

REVIEW OF HYDROGEOLOGIC INVESTIGATIONS AT THE J.F. QUEENY PLANT, MONSANTO CHEMICAL COMPANY, ST. LOUIS, MISSOURI

INTRODUCTION

At the request of Monsanto Chemical Company, Geraghty & Miller, Inc. has prepared this summary report of hydrogeologic investigations conducted at the J.F. Queeny plant, St. Louis, Missouri. The purpose of this study was to summarize the work completed to date and present the results in a single document. Most of the hydrogeological and chemical data contained in this report were developed by others. However, hydrogeologic studies are continuing at the plant to verify and supplement the existing data base.

The existing monitoring well network and data base have been developed from hydrogeologic investigations conducted by Environmental Science and Engineering, Inc. (ESE), Brotcke Engineering Company, Inc. (BEC), and Geraghty & Miller, Inc. In addition to a general study to assess site-wide ground-water quality, detailed investigations were conducted in the vicinity of the Lasso Production Area and FF Building. A review of the site-specific hydrogeology and ground-water quality is presented, followed by a summary of

the Lasso Production Area and FF Building investigations. Well construction details, water-level information, and analytical results are presented in Tables 1 through 11 and Figures 1 through 15.

PREVIOUS INVESTIGATIONS

Hydrogeologic investigations at the Queeny plant began in 1983 with the installation of 16 plant-wide monitoring wells under the supervision of ESE (Phase I wells). ESE installed 12 additional plant-wide wells in 1984 to fill data gaps (Phase II wells). Many of the monitoring wells were installed in clusters, consisting of two wells which tap different intervals within the aquifer.

Two hydrogeologic investigations were conducted in specific areas of the plant (FF Building and the Lasso Production Area) to develop more detailed information in these areas. In 1985, several soil borings and three additional monitoring wells were also installed under the direction of ESE near the FF Building to assess the impact of a tetrachloroethylene (perchloroethylene [PCE]) release to the ground. In 1987, BEC installed four PCE recovery wells in this area after ESE had completed the initial phase of work.

In a separate investigation conducted in 1986, Geraghty & Miller personnel observed the installation of several soil

borings and five monitoring wells in the vicinity of the Lasso Production Area. Well locations for each study are shown on Figure 1, and well construction details are summarized in Table 1.

HYDROGEOLOGY

Geology

The J.F. Queeny plant is situated on flood-plain deposits composed of predominantly fine- to coarse-grained sand and gravel, with local layers of silt and clay. unconsolidated deposits are underlain by bedrock composed of limestone. A generalized geologic cross section of the plant area is presented in Figure 2 which illustrates an irregular bedrock surface. In general, fill material is present in some of the plant area to depths as much as 17 ft below land surface. The fill material is underlain by finegrained silt and clay which rests on bedrock in the southern portion of the plant where bedrock is found at shallow depths. In the areas where bedrock is found at the greatest depths, coarser sand and gravel underlie the less permeable fine-grained materials, which, in turn, are underlain by additional fine-grained deposits in most areas. The qeologic logs are provided in Appendix A.

The thickness of the unconsolidated deposits increases toward the Queeny plant's eastern property boundary and probably beyond the plant property to the Mississippi River. Bedrock occurs at approximately 10 ft below land surface in the vicinity of the Lasso Production Area (bedrock high), and it is found at greater depths in other areas within the plant property. In the southeastern portion of the plant property, a quarry of undetermined depth is known to have existed in the past. The geologic logs for well cluster MW11 indicate that the quarry has been filled with native unconsolidated material and fill (bricks, concrete, etc.). The drilling of the deepest well in this cluster (MW11A) extended to 83 ft below land surface and did not encounter bedrock. Depths to bedrock within the plant area are presented in Table 1.

Ground-Water Flow Patterns

Maps showing seasonal fluctuations of the water table are presented in Figures 3, 4, and 5. Data for all water-level measurements collected at the Queeny site are summarized in Table 2. Figures 3 and 4 show a mounding of the water-table beneath the southern portion of Monsanto's Queeny property. This area is discussed in more detail in the section of this report that describes the Lasso Production Area investigation. The mound is not as prominent in

Figure 5, which represents water-table conditions during the fall (dry) season. The mound may be explained by seasonal water-level fluctuations in conjunction with a shallow depth to bedrock (about 10 ft) in that portion of the facility and changes in permeability. The horizontal component of ground-water flow is generally toward the east. Although there are local components of flow in other directions within the plant boundaries, ground water ultimately discharges into the Mississippi River.

A vertical component of ground-water flow was determined from well clusters MW1AB, MW6AB, MW7AB, MW8AB, MW11AB, and MW18AB (Table 2). The vertical direction of groundwater flow is generally downward, although water-level data for clusters MW1AB, MW6AB, MW7AB, and MW11AB indicated upward flow periodically. Since September 1985, there has been a consistently upward gradient in cluster MW1AB, with as much as 2.5 ft of head difference between the wells. occasional upward head in well clusters MW6AB and MW7AB may be related to seasonal fluctuations, as seen by head differences as great as 4 ft during June 1987. The predominantly upward head in well cluster MW11AB (maximum head difference of 2 ft in December 1986) may reflect a ground-water dis-Conversely, well clusters MW8AB and MW18AB charge area. have shown consistently downward flow, indicating that these are ground-water recharge areas (northern portion of the facility). Well construction details are provided in Appendix A.

Ground-Water Velocity

ESE conducted slug tests in 19 of the 41 existing monitoring wells to determine the hydraulic conductivity of the unconsolidated deposits. The mean hydraulic conductivity of the upper 30 ft of material is about 3 x 10^{-5} ft/sec (ft/second) (9 x 10^{-4} centimeters per second [cm/sec]). Below 30 ft, the hydraulic conductivity is approximately one-half that of the upper 30 ft and is about 1 x 10^{-5} ft/sec (4 x 10^{-4} cm/sec). The average hydraulic conductivity for both zones is 2 x 10^{-5} ft/sec and this value was used in estimating ground-water flow velocities.

The maximum and minimum lateral ground-water flow velocities of 0.5 ft/day (182 ft/year) and 0.06 ft/day (22 ft/year) were calculated by using the average value for hydraulic conductivity, a hydraulic gradient range of 0.007 to 0.05 determined from Figures 3, 4, and 5, and an assumed effective porosity of 20 percent.

The velocity values were determined from the following form of Darcy's law:

$$V = \frac{(KI) (86,400 \text{ sec/day})}{n}$$

where:

V = velocity in ft/day

K = hydraulic conductivity, in ft/sec

I = hydraulic gradient, in ft/ft, and
n = effective porosity, which is dimensionless.

The maximum velocity (1 ft/day) was calculated using the steepest water-table gradient of 13.5 ft/285 ft (0.05) from the December 1986 water-table configuration (Figure 4) in the area of well clusters 7AB and 18AB. The minimum velocity (0.006 ft/day) was determined using the minimum water-table gradient of 13 ft/1,880 ft (0.007) from the April 1985 water-table configuration, north of the mounded area (Figure 3).

GROUND-WATER QUALITY

Ground-water samples have been collected from the Phase I and Phase II monitoring well network (MW1AB through MW20) during eight sampling periods since April 1984 (Tables 3 through 7). At the time of the first three sampling rounds in 1984, only Phase I wells were installed, and Envirodyne Engineering, Inc. of St. Louis, Missouri, performed the analytical work. Subsequent sampling rounds included Phase I and Phase II wells, and analyses were performed by Environmental Testing and Certification Laboratories (ETC) of Edison, New Jersey. However, only key wells were sampled during the 1986 sampling program.

Ground-water samples were analyzed for the U.S. Environmental Protection Agency (USEPA) priority pollutant compounds, nonpriority pollutant compounds, and total organic carbon (TOC). Analytical results for volatile organic com-(VOCs), acid extractable organic compounds, pounds base/neutral extractable organic compounds (B/N), cides and polychlorinated biphenyls (PCBs), metals, and miscellaneous parameters are presented in Tables 3 through 7, respectively. Nonpriority pollutants were analyzed and some compounds have been identified; however, most of the compounds could not be quantified. Distribution of the mean total VOCs, acid extractable organic compounds, and B/N compounds are illustrated on Figures 6, 7, and 8, respectively. Neither pesticides nor PCBs were detected in any of the monitoring wells.

Priority Pollutant Organic Parameters

The overall comparison between Envirodyne and ETC data sets is satisfactory, indicating that one laboratory generally confirms the results of the other. There are some dif-

ferences, however, which are generally limited to several VOCs for specific wells. The chlorobenzene results for Wells MW3, MW4, MW6A, MW8A, and MW19 vary by three to four orders of magnitude. Although the results provided by ETC are more consistent than Envirodyne's data, there are several other VOCs with similar fluctuations in the reported results; however, these compounds are limited to Wells MW3 and MW6A. Inconsistencies within the data base were not found for the other organic groups in the priority pollutant list.

At well cluster locations 6AB, 7AB, 8AB, and 18AB in the northern portion of the plant property, the deeper well at each location has higher mean total VOCs (Figure 6). This relationship is also true for mean total acid and B/N concentrations at well clusters MW8AB and MW18AB. These data indicate that the portion of the aquifer deeper than 30 ft below land surface contains a higher concentration of dissolved organic compounds than the uppermost portion of the saturated zone in this area of the plant.

In the southern half of the plant area, high mean total VOC concentrations occur in the vicinity of the ground-water mound at MW4, MW13, MW14, and MW19. Wells MW4, MW14, and MW19 are shallow and are screened to bedrock because the

aquifer is thin. Well MW13 screens the upper and lower saturated zones (8 to 48 ft).

Nonpriority Pollutant Organic Parameters

Envirodyne Engineers and ETC have tentatively identified, from mass spectral data, a number of organic compounds that are not on the USEPA priority pollutant list (Table 8). This list of organic parameters was not divided into chemical categories (volatile organics, acid extractable, and base/neutral extractable organic compounds) because the category for many of the compounds could not be agreed upon by the analytical laboratories. These results have not been evaluated in detail because some concentrations could only be estimated and most compounds could not be quantified.

The number of wells in which each of these compounds occurred was tabulated and is included in Table 8. The majority of the compounds were detected only once and could not be confirmed in subsequent analyses. The number of compounds detected in each well is also provided in Table 8. At the two upgradient well clusters (MW1AB and MW2AB), 20 or more compounds were tentatively identified for each cluster, with the greater number of compounds being found in the deeper well. The on-site presence of these compounds (if

they are accurately identified) may be attributed to another source(s). Well clusters MW7AB and MW8AB contained the largest number of nonpriority pollutant compounds.

Priority Pollutant Metals

The concentrations of many of the metals analyzed by Envirodyne Engineers in 1984 are significantly higher than the 1985 and 1986 results reported by ETC (Table 7). Concentrations of metals reported by Envirodyne in the background well clusters (MW1AB and MW2AB) are higher in many cases than the results reported for the downgradient well locations.

Resampling the wells in 1985 and 1986, with analysis by ETC, provided results with greater consistency. For this reason, and also because of the superior reproducibility of ETC's results compared to Envirodyne's, Geraghty & Miller has little confidence in Envirodyne's data.

PERCHLOROETHYLENE INVESTIGATION

In April 1985, ESE was retained by Monsanto to conduct a hydrogeologic investigation in the vicinity of the FF Building. The study was prompted by the discovery of per-

chloroethylene (PCE) in an underground utility manhole located west of the FF Building (Figure 1). The field investigation included soil sampling at eight locations and the installation and sampling of three monitoring wells in the vicinity of an underground PCE tank that may have leaked. Sampling locations are shown on Figure 9.

Borings were drilled by hollow-stem auger equipment. Split-barrel core samples were collected every 2.5 ft to the water table (approximately 12 to 15 ft below land surface). All soil samples were screened with a photoionization meter (HNu), and the sample within each borehole displaying the highest HNu reading was retained for soils analysis. These soil samples were sent to ETC for PCE analysis. The analytical results are presented in Table 9 and on Figure 10. Evaluation of the soil sampling analyses indicates that PCE was detected in four of seven samples analyzed, and the concentration decreases rapidly with distance from the storage tank. The highest PCE concentration in soil was detected at Boring E, located about 4 ft west of the tank.

ESE installed three monitoring wells to assess the effect of the PCE release on ground water. Monitoring Wells MW-A and MW-B were installed adjacent to the PCE storage tank; together they screen the entire saturated thickness of unconsolidated materials overlying the bedrock. Monitoring

Well MW-C was drilled east of the tank to provide additional water-quality information. Well construction details are provided in Table 1. Well MW-3 is located west of the tank and was installed during a previous study.

Ground-water samples were collected from the three monitoring wells on May 23, 1985. Well MW-A was observed to have a separate liquid phase at the bottom of the well, and a sample of the liquid was collected. Free-phase liquid was not observed in any of the other three wells sampled. The five samples were analyzed for PCE by ETC, and the analytical results are provided in Table 10 and Figure 11. Ground-water analyses show that PCE was present in Wells MW-A and MW-B at 225,832 micrograms per liter (ug/L) and 27,954 ug/L, respectively. A free-phase liquid in Well MW-A was analyzed and found to contain 859,560,000 ug/L PCE. Ground-water samples from Wells MW-C and MW-3 showed no PCE contamination (Figure 11).

Monsanto designed a recovery system which involved the installation of four wells (supervised by BEC) to the north of FF Building (Figure 9). The recovery wells were installed 5 ft into bedrock with air-rotary equipment. Recovery Wells REC-3 and REC-4 began pumping in February 1987, and Wells REC-1 and REC-2 started in April 1987. A

pure-phase PCE layer was observed in the recovery tank immediately after pumping began in February, after which no additional PCE was recovered. The recovery wells were designed to pump approximately 1 gallon per minute (gpm) with the intent of creating a cone of influence to bedrock, thereby collecting the PCE layer (which is denser than Bedrock was found at 60 ft below land surface, water). rather than at the anticipated 30 ft, thus the saturated thickness of unconsolidated material significantly was greater than expected. This increased thickness required greater aquifer pumping capacity. Aquifer testing of Wells REC-3 and REC-4 showed that a pumping rate of 20 gpm in these wells did not lower the water table. However, if a free-product layer was resting on the bedrock surface at the recovery well locations, it would have been drawn into the No PCE was recovered after the initial slug was wells. removed.

LASSO INVESTIGATION

Geraghty & Miller, Inc. was retained by Monsanto in September 1986 to conduct a ground-water investigation in the vicinity of the Lasso Production Area. The objectives of the study were to determine the depth and areal extent of free-phase product which had been detected in an existing

well (MW14), and to map the local ground-water flow directions.

Ten soil borings were drilled by hollow-stem auger equipment and five were completed as monitoring wells. Boring and well locations are shown on Figure 12. Continuous soil samples were collected at 2-ft intervals down to bedrock to describe the geology and possible free-product occurrence. Soil samples revealed the subsurface to be clay and silt, rather than sand or fill as previously identified, except in a local area near MW14. Apparently, MW14 was installed in a small area that was excavated at some time in the past, and it is presently filled with coarse backfill material. Soil in Borings B-2 and B-5 was stained to a depth of 4 ft below land surface; however, free product was not observed in any of the ten soil borings.

Water-level measurements were made in each new well on December 1, 1986, and the configuration of the water table is shown on Figure 13. As discussed earlier, the ground-water mound that is usually present in this area may be the result of a shallow depth to bedrock (about 10 ft), seasonal water-level fluctuations, and changes in permeability. The overburden in this area consists of low-permeable silts and clay overlying bedrock, with fill material in the vicinity

of MW14. These variable deposits most likely will have a large range of permeability values. Their effect on the configuration of the water table could result in mounded conditions.

Ground-water samples were collected from the Geraghty & Miller wells (GM-1 through GM-5) and from Well MW14, in November 1986. Free product was only found in the bottom of Well MW14, in which approximately 3 inches had been measured. Samples were analyzed by Monsanto's laboratory for constituents associated with Lasso production, including alachlor and chlorobenzene (primary components in Lasso formulation), diethylaniline (raw material), acetyl alachlor, and CP31679 (by-products). The analytical results are provided in Table 11, and the distribution of these compounds is shown on Figures 14 and 15. However, free product only occurs in the soil in a small area confined to the coarse (backfill) material in which Well MW14 was completed. Free product has not been collected from this area because the volume appears to be too small to recover.

SUMMARY

The hydrogeologic investigations conducted to date by ESE, BEC, and Geraghty & Miller have been performed to provide site-wide knowledge of the ground-water system, as well

as to collect site-specific information in the vicinity of the FF Building and the Lasso Production Area. This work provides a substantial data base for water-level and waterquality data. However, hydrogeologic studies are continuing at the plant to verify and supplement the information contained in this report.

Respectfully submitted,

GERAGHTY & MILLER, INC.

Dennis Colton

Principal Scientist

Nicholas Valkenburg Senior Consultant

DC:NV:sm

Table 1. Summary of Construction Details for Monitoring and Recovery Wells, J.F. Queeny Plant, Monsanto Chemical Company, St. Louis, Missouri.

Well Designation	Date Installed	Measuring Point Elevation (1)		Construction Material	Screen Slot Size (Inches)	Total Depth of Well (2)	Screen Setting (3)	Height of Measuring Point Above Land Surface (ft)	To
MW1A	10/7/83	430.07	2	PVC	0.02	47	35-45	2.0	59
MW1B	10/6/83	429.82	2	PVC	0.02	30	17.5-27.5	2.5	59
MW2A	10/11/83	430.77	2	PVC	0.02	50	38.5-48.5	1.5	48.5
MW2B	10/10/83	430.70	2	PVC	0.02	27.5	15.5-25.5	2.0	48.5
MW3 (MW-D)	9/30/83	425.41	2	PVC	0.02	33	21-31	2.0	31.5
MW4	9/27/83	427.33	2	PVC	0.02	19	7-17	2.0	17.5
MW5	9/28/83	426.11	2	PVC	0.02	17	5-15	2.0	17
MW6A	9/29/83	426.82	2	PVC	0.02	44.5	32-42	2.5	50
MW6B	11/20/84	426.57	2	PVC	0.02	27.5	10-25	2.5	50
MW7A	10/5/83	422.18	2	PVC	0.02	52	40-50	2.0	95
MW7B	10/6/83	422.54	2	PVC	0.02	33.5	21-31	2.5	95
MW8A	10/27/83	423.70	2	PVC	0.02	49	37-47	2.0	82.5
MW8B	10/27/83	423.67	2	PVC	0.02	35	23-33	2.0	82.5
MW 9	10/13/83	424.92	2	PVC	0.02	43	31-41	2.0	41.5
MW10	10/12/83	425.19	2	PVC	0.02	43.5	31.5-41.5	2.0	41.5
MW11A	10/20/83	426.20	2	PVC	0.02	80	68-78	2.0	
MW11B	10/20/83	426.35	2	PVC	0.02	32	20-30	2.0	••
MW11C	11/6/84	426.23	2	PVC	0.02	27.5	10-25	2.0	
MW12	12/11/84	424.03	2	PVC	0.02	21.5	6.5-21.5	0	23
MW13	11/14/84	425.98	2	PVC	0.02	50.5	8-48	2.5	•••
MW14	12/10/84	425.92	2	Teflon	0.02	12	5-10	2.0	10
MW15 -	11/29/84	426.63	2	PVC	0.02	18	10.5-15.5	2.5	16
MW16	12/17/84	421.15	2	PVC	0.02	43.5	8.5-43.5	0	50
MW17	11/26/84	420.52	2	PVC	0.02	52.5	10-50	2.5	••
MW18A	11/30/84	423.17	2	PVC	0.02	81.5	39-79	2.5	81.5
MW188	12/6/84	423.06	2	PVC	0.02	47.5	10-45	2.5	81.5
MW19	11/19/84	424.11	2	PVC	0.02	15.5	8-13	2.5	13
MW20	11/28/84	423.27	2	PVC	0.02	26.5	9-24	2.5	26.5
MW-A	5/85		2	Teflon	0.02	30	20-30	0	31.5
MW-8	5/85		2	Teflon	0.02	17	7-17	0	••
MW-C	5/85		2	PVC	0.03	20	10-20	0	
REC-1	1/87		4	Stainless Steel	0.01	48	28-48	•••	42
REC-2	1/87		4	Stainless Steel	0.01	64.5	44.5-64.5		58
REC-3	1/87		4	Stainless Steel	0.01	66	46-66	•••	60
REC-4	1/87		4	Stainless Steel		71	51-71		66
GM-1	11/18/86	425.51	2	Stainless Steel		13.5	6.75-11.75	1.75	11.8
GM-2	11/18/86	425.46	2	Stainless Steel		11.75	4.75-9.75	2.0	9.8
GM-3	11/19/86	427.48	2	Stainless Steel		12.5	4.5-9.5	3.0	9.5
GM-4	11/20/86	424.28	2	Stainless Steel		9.5	5-10	-0.5	9.5
GM-5	11/21/86	424.53	2	Stainless Steel	0.01	16.5	6.5-16.5	-0.5	16.5

⁽¹⁾ Elevation in feet above mean sea level.

GM series wells installed by Geraghty and Miller, Inc.

⁽²⁾ Depth in feet below measuring point.

⁽³⁾ Depth in feet below land surface.

⁻⁻⁻ Indicates unknown.

All wells installed by ESE except for the following: REC series wells installed by Brotcke Engineering Company.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		October 31-No	vember 2, 1984	January	2, 1985
				*********	*********
	Measuring				
Well	Point (1)	Depth to	Water Level	Depth to	Water Level
Designation	Elevation	Water (2)	Elevation	Water	Elevation
MW1A	430.07	20.77	409.3	18.6	411.47
MW1B	429.82	19.62	410.2	17.4	412.42
MW2A	430.77	20.47	410.3	17.6	413.17
MW2B	430.70	18.20	412.5	15.0	415.70
MW3	425.41	13.81	411.6	11.9	413.51
MW4	427.33	7.23	420.1	6.6	420.73
MW5	426.11	11.31	414.8	8.6	417.51
MW6A	426.82	17.72	409.1	14.9	411.92
MW6B	426.57			15.6	410.97
MW7A	422.18	29.78	392.4	24.0	398.18
MW7B	422.54	29.24	393.3	23.8	398.74
MW8A	423.70	32.40	391.3	24.6	399.10
MW8B	423.67	22.97	400.7	22.4	401.27
MW9	424.92	20.42	404.5	16.6	408.32
MW10	425.19	21.39	403.8	16.5	408.69
MW11A	426.20	12.30	413.9	11.4	414.80
MW11B	426.35	12.55	413.8	11.7	414.65
MW11C	426.23			11.4	414.83
MW12	424.03	921	출발	7.7	416.33
MW13	425.98		**	11.1	414.88
MW14	425.92	••	**	3.8	422.12
MW15	426.63	7.7	###	12.1	414.53
MW16	421.15	**	5.5	8.7	412.45
MW17	420.52		**	11.2	409.32
MW18A	423.17	22	99	24.1	399.07
MW188	423.06		22	10.1	412.96
MW19	424.11			10.3	413.81
M⊌20	423.27			8.9	414.37

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

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		February 27-	28, 1985	March 27-	29, 1985	April 17	-24, 1985
	Measuring						
Well	Point (1)	Depth to	Water Level	Depth to	Water Level	Depth to	Water Level
esignation	Elevation	Water (2)	Elevation	Water	Elevation	Water	Elevation
MW1A	430.07	18.5	411.57	18.3	411.77	16.2	413.87
MW1B	429.82	15.7	414.12	16.2	413.62	16.8	413.02
MW2A	430.77	17.4	413.37	17.4	413.37	16.0	414.77
MW2B	430.70	15.5	415.20	15.2	415.50	14.0	416.70
MW3	425.41	12.4	413.01	12.3	413.11	18.6	406.81
MU4	427.33	7.4	419.93	7.0	420.33	9.2	418.13
MW5	426.11	9.1	417.01	8.7	417.41	9.4	416.71
MW6A	426.82	15.9	410.92	15.1	411.72	13.3	413.52
MW6B	426.57	15.2	411.37	15.1	411.47	13.2	413.37
MW7A	422.18	21.1	401.08	21.8	400.38	19.7	402.48
MW7B	422.54	21.2	401.34	21.0	401.54	19.1	403.44
MW8A	423.70	23.3	400.40	23.4	400.30	22.6	401.10
MW8B	423.67	19.9	403.77	20.1	403.57	20.3	403.37
MW9	424.92	14.6	410.32	15.1	409.82	16.1	408.82
MW10	425.19	15.5	409.69	16.0	409.19	20.3	404.89
HW11A	426.20	11.2	415.00	11.9	414.30	11.2	415.00
MW11B	426.35	11.3	415.05	11.6	414.75	11.8	414.55
MW11C	426.23	11.2	415.03	11.6	414.63	11.1	415.13
MW12	424.03	8.4	415.63	8.0	416.03	8.2	415.83
MW13	425.98	10.7	415.28	10.9	415.08	10.9	415.08
MW14	425.92	7.6	418.32	5.4	420.52	3.1	422.82
MW15	426.63	12.0	414.63	12.2	414.43	12.9	413.73
MW16	421.15	8.1	413.05	8.0	413.15	7.7	413.45
MW17	420.52	9.2	411.32	9.0	411.52	7.5	413.02
MW18A	423.17	20.5	402.67	20.1	403.07	20.5	402.67
MW18B	423.06	10.4	412.66	10.5	412.56	9.8	413.26
MW19	424.11	10.3	413.81	10.2	413.91	10.8	413.31
MW20	423.27	8.7	414.57	8.6	414.67	8.1	415.17

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		May 22-	23, 1985	June 11-	12, 1985	July 16-	23, 1985
	Measuring						
Well	Point (1)	Depth to	Water Level	Depth to	Water Level	Depth to	Water Level
esignation	Elevation	Water (2)	Elevation	Water	Elevation	Water	Elevation
MW1A	430.07	16.9	413.17	16.2	413.87	19.2	410.87
MW1B	429.82	15.1	414.72	14.8	415.02	18.7	411.12
MW2A	430.77	16.3	414.47	16.9	413.87	18.4	412.37
MW2B	430.70	16.0	414.70	14.2	416.50	16.6	414.10
MW3	425.41	11.9	413.51	10.9	414.51	12.1	413.31
MW4	427.33	9.2	418.13	8.7	418.63	8.7	418.63
MWS	426.11	9.1	417.01	9.3	416.81	8.9	417.21
MW6A	426.82	14.0	412.82	14.1	412.72	16.4	410.42
MW6B	426.57	13.8	412.77	13.3	413.27	15.5	411.07
MW7A	422.18	19.0	403.18	19.1	403.08	29.5	392.68
MW7B	422.54	20.1	402.44	19.0	403.54	29.0	393.54
MW8A	423.70	22.7	401.00	22.0	401.70	31.9	391.80
MW8B	423.67	20.4	403.27	20.9	402.77	30.0	393.67
MW9	424.92	16.3	408.62	15.8	409.12	19.6	405.32
MW10	425.19	18.9	406.29	17.0	408.19	29.3	395.89
MW11A	426.20	11.9	414.30	11.8	414.40	11.5	414.70
MW11B	426.35	11.8	414.55	11.5	414.85	11.7	414.65
MW11C	426.23	11.7	414.53	11.0	415.23	11.5	414.73
MW12	424.03	8.0	416.03	8.1	415.93	8.4	415.63
MW13	425.98	10.8	415.18	10.5	415.48	11.2	414.78
MW14	425.92	5.4	420.52	4.3	421.62	4.8	421.12 ~
MW15	426.63	12.7	413.93	12.5	414.13	13.8	412.83
MW16	421.15	7.6	413.55	7.6	413.55	8.8	412.35
MW17	420.52	7.5	413.02	8.0	412.52	11.3	409.22
MW18A	423.17	20.6	402.57	20.2	402.97	30.6	392.57
MW18B	423.06	9.6	413.46	9.4	413.66	10.5	412.56
MW19	424.11	10.2	413.91	10.0	414.11	10.3	413.81
MW20	423.27	8.7	414.57	8.3	414.97	8.9	414.37

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		August 1	4, 1985 	Septembe	r 17, 1985	October 2	4-31, 1985
	Measuring						
Well	Point (1)	Depth to	Water Level	Depth to	Water Level	Depth to	Water Level
esignation	Elevation	Water (2)	Elevation	Water	Elevation	Water	Elevation
MW1A	430.07	17.5	412.57	17.2	412.87	18.9	411.17
MW1B	429.82	16.9	412.92	17.0	412.82	19.8	410.02
MWZA	430.77	18.0	412.77	17.4	413.37	18.6	412.17
MW2B	430.70	16.0	414.70	15.8	414.9	17.7	413.00
MW3	425.41	12.2	413.21	11.8	413.61	12.9	412.51
MW4	427.33	8.9	418.43	8.6	418.73	8.9	418.43
MW5	426.11	8.9	417.21	8.8	417.31	12.2	413.91
MU6A	426.82	15.0	411.82	15.6	411.22	15.7	411.12
MW6B	426.57	15.5	411.07	15.6	410.97	15.0	411.57
MW7A	422.18	26.4	395.78	24.8	397.38	22.5	399.68
MW7B	422.54	27.8	394.74	26.7	395.84	22.2	400.34
MW8A	423.70	30.4	393.30	28.6	395.10	25.2	398.50
MW88	423.67	27.8	395.87	26.2	397.47	23.2	400.47
MW9	424.92	19.5	405.42	18.4	406.52	17.1	407.82
MW10	425.19	26.6	398.59	24.3	400.89	22.4	402.79
MW11A	426.20	11.7	414.50	11.6	414.60	11.2	415.00
MW11B	426.35	11.7	414.65	11.7	414.65	11.4	414.95
MW11C	426.23	11.2	415.03	10.9	415.33	12.1	414.13
MW12	424.03	8.5	415.53	8.3	415.73	9.0	415.03
MW13	425.98	10.9	415.08	11.1	414.88	12.0	413.98
MW14	425.92	4.5	421.42	4.6	421.32	5.3	420.62
MW15	426.63	13.7	412.93	12.9	413.73	14.1	412.53
MW16	421.15	8.1	413.05	8.6	412.55	8.3	412.85
MW17	420.52	10.6	409.92	11.0	409.52	10.3	410.22
MW18A	423.17	26.9	396.27	24.2	398.97	22.8	400.37
MW18B	423.06	10.0	413.06	9.9	413.16	10.7	412.36
MW19	424.11	10.4	413.71	10.1	414.01	10.4	413.71
MW20	423.27	8.8	414.47	9.0	414.27	8.5	414.77

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		November	27, 1985 	December	30, 1985	February	14, 1986
	Measuring						
Well	Point (1)	Depth to	Water Level	Depth to	Water Level	Depth to	Water Level
esignation	Elevation	Water (2)	Elevation	Water	Elevation	Water	Elevation
MW1A	430.07	19.5	410.57	19.6	410.47	20.1	409.97
MW1B	429.82	20.1	409.72	20.2	409.62	22.6	407.22
MW2A	430.77	19.3	411.47	19.0	411.77	19.9	410.87
MW2B	430.70	17.9	412.80	18.4	412.30	19.0	411.70
MW3	425.41	14.1	411.31	14.2	411.21	15.1	410.31
MW4	427.33	9.8	417.53	9.8	417.53	10.8	416.53
MW5	426.11	13.1	413.01	13.5	412.61	14.1	412.01
MUGA	426.82	16.2	410.62	16.0	410.82	16.9	409.92
MW6B	426.57	15.8	410.77	15.6	410.97	16.2	410.37
MW7A	422.18	23.0	399.18	23.1	399.08	24.2	397.98
MW7B	422.54	22.9	399.64	23.2	399.34	24.2	398.34
MW8A	423.70	25.9	397.80	25.8	397.90	26.9	396.80
MW8B	423.67	24.9	398.77	24.6	399.07	25.2	398.47
MW9	424.92	18.1	406.82	18.3	406.62	19.8	405.12
MW10	425.19	23.0	402.19	23.1	402.09	24.3	400.89
MW11A	426.20	11.7	414.50	11.8	414.40	13.1	413.10
MW118	426.35	12.2	414.15	12.0	414.35	13.4	412.95
MW11C	426.23	12.9	413.33	12.1	414.13	13.5	412.73
MW12	424.03	9.0	415.03	8.9	415.13	10.2	413.83
MW13	425.98	11.8	414.18	12.1	413.88	13.5	412.48
MW14	425.92	6.0	419.92 ~	6.0	419.92 -	7.4	418.52
MW15	426.63	15.1	411.53	14.8	411.83	16.0	410.63
MW16	421.15	9.4	411.75	9.2	411.95	10.4	410.75
MW17	420.52	11.1	409.42	10.8	409.72	12.0	408.52
MW18A	423.17	23.2	399.97	23.7	399.47	24.9	398.27
MW188	423.06	11.7	411.36	11.5	411.56	12.8	410.26
MW19	424.11	10.4	413.71	10.6	413.51	11.8	412.31
MW20	423.27	9.1	414.17	9.2	414.07	10.6	412.67

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		June 1	9, 1986	August 14	4, 1986	December	1, 1986
	Measuring						
Well	Point (1)	Depth to	Water Level	Depth to	Water Level	Depth to	Water Leve
esignation	Elevation	Water (2)	Elevation	Water	Elevation	Water	Elevation
MU1A	430.07	20.2	409.87	20.0	410.07	18.18	411.89
MW1B	429.82	22.4	407.42	22.5	407.32	18.29	411.53
MW2A	430.77	20.0	410.77	20.0	410.77	17.66	413.11
MW2B	430.70	19.1	411.60	19.1	411.60	16.29	414.41
MW3	425.41	15.0	410.41	15.1	410.31	13.43	411.98
MH4	427.33	10.8	416.53	10.7	416.63	8.60	418.73
MW5	426.11	14.2	411.91	14.2	411.91	11.28	414.83
MUGA	426.82	16.9	409.92	16.8	410.02	16.69	410.13
MU68	426.57	16.4	410.17	16.4	410.17	14.42	412.15
MW7A	422.18	24.6	397.58	24.4	397.78	21.04	401.14
MW7B	422.54	24.2	398.34	24.2	398.34	20.70	401.84
MUSA	423.70	26.8	396.90	26.8	396.90	23.83	399.87
MW88	423.67	25.4	398.27	25.4	398.27	23.03	400.64
MW9	424.92	20.0	404.92	19.9	405.02	18.61	406.31
MW10	425.19	24.4	400.79	24.5	400.69	23.88	401.31
MW11A	426.20	13.0	413.20	13.0	413.20	10.99	415.21
MW118	426.35	13.5	412.85	13.3	413.05	13.26	413.09
MW11C	426.23	13.5	412.73	13.6	412.63	11.38	414.85
MW12	424.03	10.4	413.63	10.3	413.73	6.89	417.14
MW13	425.98	13.6	412.38	13.7	412.28	10.69	415.29
MW14	425.92	7.5	418.42	7.3	418.62	3.83	422.09
MW15	426.63	16.1	410.53	16.0	410.63	8.30	418.33
MW16	421.15	10.3	410.85	10.4	410.75	••	
MW17	420.52	11.9	408.62	12.0	408.52	19.71	400.81
MW18A	423.17	25.2	397.97	25.0	398.17	22.45	400.72
MW188	423.06	12.9	410.16	12.9	410.16	7.76	415.30
MW19	424.11	11.9	412.21	11.9	412.21	11.7	412.41
MW20	423.27	10.5	412.77	10.5	412.77	8.09	415.18
GM-1*	425.51					9.08	416.43
GM-2	425.46					8.94	416.52
GM-3	427.48					5.30	422.18
GM-4	424.28					2.05	422.23
GM-5	424.53					2.58	421.95

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

^{*} GM series wells installed in November, 1986. Water-level measurements were only collected in December 1986.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		March 18,	1987	June 2	4, 1987	September	23, 1987
	Measuring						
Well	Point (1)	Depth to	Water Level	Depth to	Water Level	Depth to	Water Leve
esignation	Elevation	Water (2)	Elevation	Water	Elevation	Water	Elevation
MW1A	430.07	18.4	411.67	19.8	410.27	18.3	411.77
MW1B	429.82	18.6	411.22	19.7	410.12	18.9	410.92
MW2A	430.77	16.8	413.97	12.1	418.67	13.0	417.77
MW2B	430.70	16.3	414.40	11.2	419.50	11.4	419.30
MW3	425.41	13.5	411.91	14.1	411.31	13.0	412.41
MW4	427.33	8.0	419.33	8.0	419.33	8.2	419.13
MW5	426.11	14.7	411.41	18.0	408.11	17.4	408.71
MUGA	426.82	16.8	410.02	18.2	408.62	17.0	409.82
MW6B	426.57	15.7	410.87	22.2	404.37	17.8	408.77
MW7A	422.18	21.8	400.38	22.4	399.78	22.0	400.18
MW7B	422.54	22.3	400.24	26.5	396.04	22.7	399.84
MW8A	423.70	25.4	398.30	26.5	397.20	25.1	398.60
MW88	423.67	22.5	401.17	9.7	413.97	15.3	408.37
MW9	424.92	21.9	403.02	26.6	398.32	23.0	401.92
MW10	425.19	20.8	404.39	10.8	414.39	18.2	406.99
HW11A	426.20	11.5	414.70	10.2	416.00	11.4	414.80
MW11B	426.35	12.9	413.45	10.9	415.45	11.1	415.25
MW11C	426.23	11.3	414.93	7.6	418.63	8.8	417.43
MW12	424.03	8.2	415.83	10.2	413.83	10.2	413.83
MW13	425.98	9.8	416.18	7.7	418.28	8.4	417.58
MW14	425.92	5.0	420.92 -	10.2	415.72	9.5	416.42
MW15	426.63	8.4	418.23	7.6	419.03	8.2	418.43
MW16	421.15	11.8	409.35	13.0	408.15	12.9	408.25
MW17	420.52	13.7	406.82	31.1	389.42	14.8	405.72
MU18A	423.17	20.5	402.67	10.3	412.87	18.7	404.47
MW188	423.06	8.3	414.76	11.0	412.06	12.9	410.16
MW19	424.11	10.9	413.21	8.2	415.91	10.4	413.71
MW20	423.27	9.3	413.97	11.0	412.27	10.5	412.77

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 2. Water-Level Elevations in Monitoring Wells, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

November 17, 1987

Measuring Well Point (1) Depth to Water Level Designation Elevation Water (2) Elevation 430.07 18.1 411.97 MU1A MW1B 429.82 18.4 411.42 MW2A 430.77 12.7 418.07 MW2B 430.70 11.0 419.70 -425.41 12.8 412.61 MW3 418.73 MW4 427.33 8.6 409.21 MV5 426.11 16.9 MW6A 426.82 16.4 410.42 MW6B 426.57 16.9 409.67 MW7A 422.18 21.4 400.78 MW7B 422.54 20.0 402.54 399.80 MU8A 423.70 23.9 404.97 MW88 423.67 18.7 424.92 404.82 MW9 20.1 MW10 425.19 17.1 408.09 MW11A 426.20 10.9 415.30 426.35 414.65 MW11B 11.7 MW11C 426.23 10.3 415.93 424.03 11.1 412.93 MW12 425.98 9.9 416.08 MW13 425.92 8.8 417.12 MW14 MW15 426.63 7.7 418.93 MW16 421.15 11.3 409.85 MW17 420.52 13.1 407.42 423.17 17.4 405.77 HW18A MW188 423.06 13.1 409.96 MU19 424.11 11.3 412.81 MW20 423.27 9.1 414.17

¹⁾ Elevation in feet above mean sea level.

²⁾ Depth to water in feet below measuring point.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1B	MW1B	MW1B
Date: USEPA Priority Pollutant	4/84	8/84	10/84	1/85	4/85	7/85	10/85	4/84	8/84	10/84
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	<6.0	ND	ND	ND
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	14	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ND	ND	ND	NĐ	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	21	ND	9	19	ND	ND	<2.8	20	56	9
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1	3	ND	ND	ND	ND	<6.0	ND	ND	0.4
1,2-trans-Dichloroethylene	ND	ND	0.4	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs Analyzed	23	3	9.4	33	0	0	0	20	56	9.4

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

MW18 MW1B MW1B MW2A Well Designation: MW1B MW2A MW2A MW2A MW2A MW2A Date: 1/85 4/85 7/85 10/85 4/84 8/84 10/84 1/85 4/85 7/85 USEPA Priority Pollutant Volatile Organic Compounds (Concentrations are in ug/L) Acrolein ND Acrylonitrile ND ND ND ND ND ND ND ND 2 ND ND ND ND Benzene Bis (chloromethyl) ether ND ND ND ND ND ND ND ND **Bromoform** ND Carbon tetrachloride ND Chlorobenzene ND ND ND ND ND 61 ND ND ND ND Chlorodibromomethane ND Chioroethane ND MD ND NO ND MD ND ND ND ND 2-Chloroethylvinyl ether ND MD ND ND ND ND ND ND ND ND Chloroform ND ND ND ND ND ND 0.4 ND ND ND Dichlorobromomethane ND ND ND ND ND ND ND ND Dichlorodifluoromethane ND ND ND ND ND ND ND ND ND 1,1-Dichloroethane ND 1,2-Dichloroethane ND ND ND ND 1,1-Dichloroethylene ND MD ND 1,2-Dichloropropane MD ND ND MD MO MD ND ND ND ND ND MD cis-1,3-Dichloropropylene ND ND ND ND ND ND trans-1,3-Dichloropropylene ND Ethylbenzene ND Methyl bromide ND Methyl chloride ND Methylene chloride 20 ND 8.22 11.6 52 13 14 ND ND ND ND 1,1,2,2-Tetrachloroethane ND ND ND MD ND ND ND ND ND MD MD ND ND Tetrachloroethylene MD ND 0.8 ND MD ND 2 0.5 Toluene ND ND ND ND 2 ND ND ND 1,2-trans-Dichloroethylene ND 1,1,1-Trichloroethane ND 1,1,2-Trichloroethane ND ND ND ND ND ND ND ND Trichloroethylene ND Trichlorofluoromethane MD NĐ ND ND ND ND ND ND ND Vinyl chloride MD MD MD MD MD ND ND ND ND ND Total VOCs Analyzed 20 0 8.2 11.6 54 78 15.7 0 0 0

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Hell Designations	MWZA	MW2A	MW2B	MW2B	MW2B	MW2B	MW2B	MW2B	MW2B	MW3
Well Designation: Date:	10/85	12/86	4/84	8/84	10/84	1/85	4/85	7/85	10/85	4/84
JSEPA Priority Pollutant	10,03	12,00	1,01	0,01	.0,0	., 53	.,	.,	.0,05	1,01
/olatile Organic Compounds										
(Concentrations are in ug/L)										
	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3enzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	184
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methylene chloride	<2.8	10.9	40	6	6	32	ND	ND	7.54	17
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	3
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Toluene	ND	ND	ND	ND	0.5	ND	ND	ND	ND	3
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	481
1,1,1-Trichloroethane	ND	ND	1	ND	ND	ND	ND	ND	ND	NC
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	56
								• • • • • • • • • • • • • • • • • • • •		

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW3	MW3	MW3	MW3	MW3	MW3	MW4	MW4	MW4	MW4
Date:	8/84	10/84	1/85	4/85	7/85	10/85	4/84	8/84	10/84	1/85
JSEPA Priority Pollutant										
/olatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Benzene	8	7	12	18	<44	ND	6	9	ND	NC
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC NC
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chlorobenzene	ND	86	2,300	4,270.6	3,180	7,380	41,400	471	1	753
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Chloroform	ND	ND	ND	ND	ND	ND	12	ND	ND	NC
oichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
oichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	17	8	NE
1,1-Dichloroethylene	ND	18	ND	28.9	<28	ND	ND	ND	ND	NE
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
is-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Ethylbenzene	ND	ND	ND	ND	<72	ND	2	ND	ND	NE
fethyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methylene chloride	4	7	25	ND	74.0	15,600	43	2	6	30
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	3	10	69	194.9	146	ND	1	ND	ND	NC
rol uene	2	0.6	ND	ND	<60	ND	2	21	0.4	NE
,2-trans-Dichloroethylene	ND	4,660	5,760	7,694.6	7,120	7,840	3	ND	ND	NE
i,1,1-Trichloroethane	ND	NA	ND	ND	<38	ND	ND	ND	ND	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
[richloroethyl ene	ND	ND	ND	ND	3,550	6,620	ND	ND	1	NC
richlorofluoromethane	1,240	1,025	1,680	4,379	ND	ND	ND	ND	ND	ND
/inyl chloride	594	662	401	1,128	1,050	<2,500	ND	ND	ND	NE
Total VOCs Analyzed		6.475.6	10,247	17,714	15,120	37.440	41,469	520	16.4	783

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MU4	MW4	MW4	MW4	MW4	MW5	MWS	MW5	MW5	MW5
Date:	4/85	7/85	10/85	10/85*	12/86	4/84	8/84	10/84	1/85	4/85
JSEPA Priority Pollutant										
/olatile Organic Compounds										
(Concentrations are in ug/L)										
									• • • • • • • • •	
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	14.5	ND	ND	ND	<44	ND	ND	ND	ND	ND
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene Chlorobenzene	7,943.8	7,070	4,220	4,170	2,680	259	ND	ND	ND	ND
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ND	ND	ND	ND	NĐ	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	9.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	1	ND	ND	ND	ND
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	2.8	ND	762	ND	ND	13	2	7	53	9
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Toluene	ND	ND	ND	ND	ND	1	ND	0.6	ND	NE
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2	ND	ND	ND	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Total VOCs Analyzed	7,970.3	7,070	4,982	4,170	2,680	276	2	7.6	53	٠٠٠٠٠٠

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW5	MW5	MW5	MW6A	MW6A	MW6A	MW6A	MW6A	MW6A	MW6A
Date:	7/85	10/85	12/86	4/84	8/84	10/84	1/85	4/85	7/85	10/85
JSEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Benzene	ND	ND	ND	449	272	99	ND	176.3	ND	218
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Chlorobenzene –	ND	ND	<6.0	42,900	186	1,678	ND	36,580	28,900	53,700
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chloroform	ND	ND	ND	1,040	ND	ND	4	ND	ND	NO
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,1-Dichloroethane	ND	ND	<4.7	ND	4	ND	6.4	ND	ND	N
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	3.7	ND	ND	N
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	494	ND	ND	N
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Ethylbenzene	ND	ND	ND	ND	26	ND	ND	54.6	ND	82.
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Methylene chloride	9.10	ND	<2.8	36,800	26	8	ND	18.4	24,600	29.
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
foluene .	ND	<6.0	ND	27,700	81	NA	ND	14,780	41,100	10,30
1,2-trans-Dichloroethylene	ND	<1.6	ND	ND	5	175	ND	ND	ND	N
1,1,1-Trichloroethane	ND	ND	ND	1,090	ND	ND	ND	ND	ND	N
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
Trichloroethylene	ND	ND	ND	ND	ND	ND	3.5	ND	ND	NI
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
Vinyl chloride	ND	ND	ND	ND	6	119	ND	ND	ND	N

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MH6A	MW6B	MW6B	MW6B	MW6B	MW7A	MW7A	MW7A	MW7A	MW7A
Date:	10/85*	1/85	4/85	7/85	10/85	4/84	8/84	10/84	1/85	4/85
USEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)						/5000				
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	202	ND	8.4	8.12	ND	29	80	53	19	58.3
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	45,200	1,120	1,627.6	1,620	1,740	257	1,038	800	5 58	1,185.9
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	NĐ	ND	8	2	ND	ND	ND
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,2-Dichloroethane	ND	ND	ND	ND	ND	15	39	19	13	44
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,2-Dichloroprop ane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	74.6	ND	<7.2	<7.2	ND	2	9	9	ND	8.4
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methylene chloride	<28	ND	ND	ND	<28	19	116	5	18	16.6
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Tetrachloroethylene	ND	ND	ND	ND	ND	2	6	4	ND	6.5
Toluene	7,890	ND	ND	<6.0	ND	ND	7	5	ND	6.5
1,2-trans-Dichloroethylene	ND	ND	<1.6	ND	ND	23	22	14	ND	15
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2	ND	ND	ND	NC
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	3	ND	ND	ND	NE
Trichloroethyl ene	ND	ND	ND	ND	ND	2	4	2	ND	NC
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Vinyl chloride	ND	ND	ND	ND	ND	152	302	68	24	125.3

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW7A	MW7A	MW7A	MW7B	MW7B	MW7B	MW7B	MW7B	MW7B	MW78
Date:	7/85	10/85	12/86	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Benze ne	52.9	151	<88	6	14	5	ND	4.9	ND	NC
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chlorobenzene	1,590	1,710	1,240	ND	363	239	251	157.2	85 .8	244
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Chloroform	ND	ND	ND	41	408	825	455	388.9	110	812
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Ethylbenzene	ND	ND	<140	ND	ND	ND	ND	ND	<7.2	NC
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methylene chloride	110	ND	ND	19	55	8	ND	ND	19.8	68.0
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Toluene	64.1	ND	<120	1	19	ND	ND	ND	ND	NE
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,1,1-Trichloroethane	ND	ND	ND	1	ND	ND	ND	ND	ND	NE
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Vinyl chloride	<100	ND	ND	NĐ	ND	ND	ND	ND	ND	NO

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW7B	ASWM	MW8A	MW8A	MW8A	MW8A	A8WM	MW8A	MW8A	MW8A
Date:	12/86	4/84	8/84	10/84	1/85	4/85	7/85	10/85	12/86	12/86*
USEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Benz ene	<4.4	106	224	106	ND	173.7	ND	148	ND	NE
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	<44
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Chlorobenzene	78.3	15,150	183	1,925	10,400	16,079.4	38,300	8,820	1,100	2,470
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Chloroform	193	ND	ND	ND	ND	ND	ND	ND	ND	NE
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,1-Dichloroethane	ND	ND	1	ND	ND	ND	ND	ND	ND	NE
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
cis-1,3-Dichloropropylene	ND	11 (a)	ND	ND	ND	ND	ND	ND	ND	NI
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
Ethylbenzene	ND	ND	10	b)	ND	ND	ND	ND	ND	N
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Methylene chloride	29.3	18	3	8	356	54	ND	ND	ND	96.
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
Toluene	ND	2	2	b)	ND	ND	ND	ND	ND	N
1,2-trans-Dichloroethylene	ND	17	18	12	ND	ND	ND	ND	ND	N
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	N
Vinyl chloride	ND	ND	79	6	ND	135.1	ND	ND	ND	N
Total VOCs Analyzed	300.6	15,304	520	2,057	10 756	16.442.2	38,300	8,968	1 100	2,566.2

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW8B	MW8B	MW8B	88WM	MW88	MW8B	MW8B	MW8B	MW9	MW9
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	12/86	4/84	8/84
USEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND.
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	1	48	ND	ND	ND	ND	ND	ND	ND	27
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	37	2	5	15	ND	11.2	<2.8	<2.8	41	1
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	1	ND
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	- ND	ND	ND	ND	ND	1	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethyl ene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs Analyzed	38	50	5	15	0	11.2	0	0	43	28

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW9	MW9	MW9	MW9	MW9	MW9	MW10	MW10	MW10	MW10
Date:	10/84	1/85	4/85	7/85	10/85	12/86	4/84	8/84	10/84	1/85
JSEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzen e	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	NĐ	ND	ND	ND	23.4	ND	ND	22	ND	ND
Chlorodibromometh ane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	2	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroeth ane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
trans-1,3-Dichloropropylene	ND	NĐ	ND	ND	ND	ND	ND	ND	ND	ND
Eth y lbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	6	16	ND	ND	10.9	ND	60	9	6	46
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	<6.0	ND	1	ND	0.7	ND
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	NĐ	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Trichlorofluorometh ane	ND	ND	ND	<10.0	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
•		• • • • • • • • •								

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW10 MW10 MW10 MW10 MW11A MW11A MW11A MW11A MW11A MW11A Date: 4/85 7/85 10/85 12/86 4/84 8/84 10/84 1/85 4/85 7/85 USEPA Priority Pollutant Volatile Organic Compounds (Concentrations are in ug/L) ND ND ND ND ND ND Acrolein ND Acrylonitrile ND ND ND Benzene ND ND ND ND ND ND ND Bis (chloromethyl) ether ND **Bromoform** ND ND ND ND Carbon tetrachloride ND 41 ND Chlorobenzene ND ND ND ND ND ND ND ND Chlorodibromomethane ND Chloroethane ND ND ND ND MD ND ND MD MD MD 2-Chloroethylvinyl ether ND ND ND ND Chloroform ND ND ND ND ND ND ND Dichlorobromomethane ND Dichlorodifluoromethane ND 1,1-Dichloroethane ND ND 1,2-Dichloroethane ND 1,1-Dichloroethylene ND ND ND ND ND ND ND ND 1,2-Dichloropropane ND ND ND ND MD ND MD ND ND ND ND ND cis-1,3-Dichloropropylene ND trans-1,3-Dichloropropylene ND ND ND ND ND MD MD MD MD ND MD ND Ethylbenzene ND ND ND ND ND ND ND ND Methyl bromide ND Methyl chloride ND 15.0 2 5 10 ND ND Methylene chloride 22.8 <2.8 12.6 ND ND ND ND ND ND ND ND ND 1,1,2,2-Tetrachloroethane ND Tetrachloroethylene 0.4 ND ND ND ND ND ND ND 1 ND Toluene NO ND ND ND ND MD ND ND ND 1,2-trans-Dichloroethylene ND 1,1,1-Trichloroethane ND 1,1,2-Trichloroethane ND Trichloroethylene ND Trichlorofluoromethane ND Vinyl chloride ND

12.6

0

44

5.4

10

0

0

n

15

22.8

Total VOCs Analyzed

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW11A MW11A MW11B MW118 MW118 MW11B MW11B MW11B MW11B MW11B Date: 10/85 12/86 4/84 8/84 10/84 1/85 4/85 7/85 10/85 12/86 **USEPA Priority Pollutant** Volatile Organic Compounds (Concentrations are in ug/L) ND Acrolein ND Acrylonitrile ND Benzene ND ND ND ND ND ND ND Bis (chloromethyl) ether ND **Bromoform** ND ND ND Carbon tetrachloride ND Chlorobenzene ND ND ND 4 1 ND Chlorodibromomethane ND Chloroethane ND 2-Chloroethylvinyl ether ND Chloroform ND Dichlorobromomethane ND MD ND ND ND ND ND ND Dichlorodifluoromethane ND ND ND ND ND ND ND 1,1-Dichloroethane ND ND ND ND ND 1,2-Dichloroethane ND ND ND ND ND ND ND ND ND ND

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ND

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ND

3.4

3.39

ND

0

1,1-Dichloroethylene

cis-1,3-Dichloropropylene

1,1,2,2-Tetrachloroethane

1,2-trans-Dichloroethylene

Total VOCs Analyzed

trans-1,3-Dichloropropylene

1,2-Dichloropropane

Ethylbenzene

Toluene

Methyl bromide

Methyl chloride

Methylene chloride

Tetrachloroethylene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

Trichlorofluoromethane

Trichloroethylene

Vinyl chloride

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW11C MW11C MW11C MW11C MW11C MW12 MW12 MW12 MW12 MW12 Date: 1/85 4/85 7/85 10/85 12/86 1/85 4/85 7/85 10/85 12/86 USEPA Priority Pollutant Volatile Organic Compounds (Concentrations are in ug/L) Acrolein ND Acrylonitrile MD ND ND ND ND ND ND ND Benzene ND Bis (chloromethyl) ether ND Bromoform ND Carbon tetrachloride ND Chlorobenzene ND ND ND ND <6.0 ND ND ND ND ND Chlorodibromomethane ND ND ND ND ND ND ND MD ND ND Chloroethane MD ND MD ND ND ND ND ND ND ND 2-Chloroethylvinyl ether ND Chloroform ND Dichlorobromomethane ND ND ND ND ND ND ND ND ND Dichlorodifluoromethane ND ND ND 29 18.2 <10.0 ND 23.3 1,1-Dichloroethane ND ND ND ND ND ND ND ND ND ND

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MD

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ND

ND

ND

22.8

22.8

ND

36.6

13.3

1,2-Dichloroethane

1,1-Dichloroethylene

1,2-Dichloropropane

Ethyl benzene

Toluene

Methyl bromide

Methyl chloride

Methylene chloride

Tetrachloroethylene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

Trichlorofluoromethane

Trichloroethylene

Vinyl chloride

cis-1,3-Dichloropropylene

1,1,2,2-Tetrachloroethane

1,2-trans-Dichloroethylene

Total VOCs Analyzed

trans-1,3-Dichloropropylene

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

	=======	=======	========	*********		=======	========	========	:=== ====:	=======
Well Designation:	MW13	MW13	MW13	MW13	MW13	MW14	MW14	. MW14	MW14	MW14
Date:	1/85	4/85	7/85	10/85	12/86	1/85	4/85	7/85	10/85	12/86
USEPA Priority Pollutant	•	•	•	·	-	-	•	•	·	
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	5.7	ND	<4.4	<22	ND	ND	ND	ND	ND
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND:
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	33	1,640	1,295	342	1,140	48,000	140,544	132,000	163,000	110,000
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	, ND	, ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	343	ND	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	780	ND	<2,800	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
- Total VOCs Analyzed	33	1,645.7	1,295	342	1,140	48,343	141,324	132,000	163,000	110,000

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW15 MW15 MW15 MW15 MW15 MW16 MW16 MW16 MW16 MW17 Date: 1/85 4/85 7/85 10/85 12/86 1/85 4/85 7/85 10/85 1/85 **USEPA Priority Pollutant** Volatile Organic Compounds (Concentrations are in ug/L) Acrolein ND Acrylonitrile ND ND ND ND Benzene ND Bis (chloromethyl) ether ND **Bromoform** ND Carbon tetrachioride ND ND ND ND ND ND ND ND ND Chlorobenzene 21 22.6 ND ND ND 31 46.8 46.7 38.2 11 Chlorodibromomethane ND ND ND ND ND ND ND ND ND MD Chloroethane ND 2-Chloroethylvinyl ether ND Chloroform ND ND ND ND ND ND ND ND ND Dichlorobromomethane ND Dichlorodifluoromethane ND ND ND ND ND ND ND ND ND 1,1-Dichloroethane ND ND ND ND ND ND ND ND ND 1,2-Dichloroethane ND 1,1-Dichloroethylene ND 1,2-Dichloropropane ND ND ND ND MO ND ND ND ND MD cis-1,3-Dichloropropylene ND trans-1,3-Dichloropropylene ND Ethylbenzene ND Methyl bromide ND Methyl chloride ND Methylene chloride 20 ND <2.8 9.20 5.13 ND <2.8 ND 20.2 19 1,1,2,2-Tetrachloroethane ND Tetrachloroethylene ND ND ND ND ND ND ND MD ND ND Toluene ND ND MD 19,4 MD ND MD MD ND ND 1,2-trans-Dichloroethylene ND ND ND ND ND ND ND ND 40.9 ND 1,1,1-Trichloroethane ND 1,1,2-Trichloroethane ND Trichloroethylene ND Trichlorofluoromethane ND Vinyl chloride ND ND ND ND ND ND ND ND ND ND

Total VOCs Analyzed

41

22.6

n

9.2

5.1

31

46.8

46.7

118.7

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW17 MW17 MW17 MW18A MW18A MW18A MW18A MW18A MW18B MW18B 4/85 7/85 4/85 10/85 12/86 Date: 10/85 1/85 7/85 1/85 4/85 **USEPA Priority Pollutant** Volatile Organic Compounds (Concentrations are in ug/L) ND Acrolein ND ND ND ND MD ND Acrylonitrile ND ND Benzene ND ND ND ND 6.2 <440 121 13.7 ND ND Bis (chloromethyl) ether ND Bromoform ND ND ND ND ND ND ND ND ND Carbon tetrachloride ND ND ND ND ND ND ND ND 1,750 Chlorobenzene 11.6 <6.0 ND 63 126.5 5,380 193 ND ND Chlorodibromomethane ND Chloroethane ND NO ND ND ND ND ND ND ND ND 2-Chloroethylvinyl ether ND ND ND ND ND ND NO ND ND ND ND ND ND ND Chloroform ND MD MD ND ND ND Dichlorobromomethane ND Dichlorodifluoromethane ND 1,1-Dichloroethane ND 1,2-Dichloroethane ND ND ND ND ND ND 1,1-Dichloroethylene ND 1,2-Dichloropropane ND cis-1,3-Dichloropropylene ND ND MD MD MĐ MD trans-1,3-Dichloropropylene MD MD ND ND ND ND Ethylbenzene ND ND MD ND <720 ND MD ND ND ND Methyl bromide ND Methyl chloride ND Methylene chloride ND 4.8 ND ND ND 1,680 195 7.97 ND 6 1,1,2,2-Tetrachloroethane ND ND ND ND ND ND ND ND ND Tetrachloroethylene ND Toluene ND ND ND ND ND <600 <60 <6.0 ND ND 1,2-trans-Dichloroethylene 2.0 ND ND ND 15.2 ND ND ND ND <1.6 1,1,1-Trichloroethane ND 1,1,2-Trichloroethane ND Trichloroethylene ND ND ND ND 15.6 ND ND ND ND 1.9 Trichlorofluoromethane ND ND ND ND ND ND ND ND Vinyl chloride ND ND ND ND ND ND ND ND ND ND

63

163.5

7,060

2,066

214.7

0

7.9

0

Total VOCs Analyzed

13.6

4.8

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

MW19 Well Designation: MW18B MW18B MW188 MW19 MW19 MW19 MW19 MW20 MW20 Date: 7/85 10/85 12/86 1/85 4/85 7/85 10/85 12/86 1/85 4/85 **USEPA Priority Pollutant** Volatile Organic Compounds (Concentrations are in ug/L) ND ND ND ND ND ND ND ND Acrolein ND Acrylonitrile 60.3 ND 67.0 ND ND ND ND 24 ND Benzene <4.4 ND ND ND ND ND Bis (chloromethyl) ether ND ND ND ND ND MD ND ND ND ND ND ND ND **Bromoform** ND ND Carbon tetrachloride ND ND ND ND MD ND ND ND ND ND Chlorobenzene ND ND ND 15,800 36,460 ND 43,700 ND ND ND Chlorodibromomethane ND Chloroethane ND 2-Chloroethylvinyl ether ND Chloroform ND Dichlorobromomethane MD ND ND NĐ ND ND Dichlorodifluoromethane ND MD ND ND 5.8 <4.7 MD ND ND ND ND ND 1,1-Dichloroethane ND ND 1,2-Dichloroethane ND ND MD ND 4.6 ND ND ND ND ND 1,1-Dichloroethylene ND 1,2-Dichloropropane cis-1,3-Dichloropropylene ND ND ND ND ND ND ND ND ND trans-1,3-Dichloropropylene ND Ethylbenzene ND ND ND ND ND ND ND Methyl bromide ND ND ND ND MD ND MD MD ND ND Methyl chloride ND MD ND ND 6.45 447 3.80 MD ND 7 6.14 ND 4.4 Methylene chloride 12.4 1,1,2,2-Tetrachloroethane ND Tetrachloroethylene ND 31 51.6 <6.0 25.3 ND ND ND 17 ND ND 1,2-trans-Dichloroethylene ND ND ND ND ND ND ND 1,1,1-Trichloroethane ND MD ND ND ND ND ND ND ND ND 1,1,2-Trichloroethane MD MD MD ND <1.9 ND MD ND ND ND Trichloroethylene Trichlorofluoromethane ND MD ND MD <10.0 ND ND ND ND ND Vinyl chloride ND ND ND 99 97.9 ND 46.4 ND ND ND 15,971 36,687.2 447 43,842.5 4.4 Total VOCs Analyzed 12.4 6.5

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

***************************************		=======		=======	=======	=======			*******	======
				FIELD			FIELD			
Well Designation:	MW20	MM20	MW20	BLANK	XFB1	XFB1	BLANK	XFB2	XFB2	BLANK
Date:	7/85	10/85	12/86	7/85	10/85	12/86	7/85	10/85	12/86	10/84
USEPA Priority Pollutant										
Volatile Organic Compounds										
(Concentrations are in ug/L)										
Acrolein	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Chlorobenzene	ND	<6.0	ND	ND	ND	ND	ND	ND	ND	NC
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Chloroform	ND	ND	ND	1.6	ND	ND	ND	ND	ND	NC
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NO
1,2-Dichloropropane	ND	ND	ND	NO	ND	ND	ND	ND	ND	NC
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Methylene chloride	7.74	ND	20.8	5.8	ND	4.14	ND	<2.8	8.32	20
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Toluene	ND	ND	ND	<6.0	ND	ND	ND	ND	ND	1
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NC
Trichlorofluoromethane	N/D	ND	ND	ND	ND	ND	ND	ND	ND	NE
Vinyl chloride	NĐ	ND	ND	<10.0	ND	ND	ND	ND	ND	NC
- Total VOCs Analyzed	7.7	0	20.8	7.4	0	4.1	0	0	8.3	21

ND Not Detected.

^{*} Replicate Sample.

Table 3. Summary of Volatile Organic Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

=======================================		:=======		=======			=====
		LAB	LAB	LAB	METHOD	JAR	JAF
Well Designation:	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
Date:	10/84	10/84	10/84	10/84	1/85	1/85	4/85
USEPA Priority Pollutant							
Volatile Organic Compounds							
(Concentrations are in ug/L)							
Acrolein	ND	ND	ND	ND	ND	ND	NE
Acrylonitrile	ND	ND	ND	ND	ND	ND	N
Benzene	0.5	ND	ND	NĐ	ND	ND	N
Bis (chloromethyl) ether	ND	ND	ND	ND	ND	ND	NI
Bromoform	ND	ND	ND	ND	ND	ND	NI
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	N
Chlorobenzene	ND	ND	ND	ND	ND	ND	N
Chlorodibromomethane	ND	ND	ND	ND	ND	ND	N
Chloroethane	ND	ND	ND	ND	ND	ND	N
2-Chloroethylvinyl ether	ND	ND	ND	ND	ND	ND	N
Chloroform	0.4	ND	ND	ND	ND	ND	N
Dichlorobromomethane	ND	ND	ND	ND	ND	ND	N
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	N
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	N
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	NI
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	N
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	N
cis-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	N
trans-1,3-Dichloropropylene	ND	ND	ND	ND	ND	ND	NI
Ethylbenzene	ND	ND	ND	ND	ND	ND	NI
Methyl bromide	ND	ND	ND	ND	ND	ND	N
Methyl chloride	ND	ND	ND	ND	ND	ND	N
Methylene chloride	12	38	28	28	14	ND	N
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	N
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	N!
Toluene	1	0.7	0.6	1	ND	ND	N
1,2-trans-Dichloroethylene	ND	ND	ND	ND	ND	ND	N
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	N
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	NI.
Trichloroethylene	ND	ND	ND	ND	ND	ND	NI NI
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	NI NI
Vinyl chloride	ND	ND	ND	ND	ND	ND	NI
- Total VOCs Analyzed	13.9	38.7	28.6	29	14	0	(

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

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Well Designation:	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1B
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	4/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

************************	========	-235555555555			=========			:=======
Well Designation:	MW1B	MW1B	MW1B	MW1B	MW1B	MW1B	MW2A	MW2A
Date:	8/84	10/84	1/85	4/85	7/85	10/85	4/84	8/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MWZA	MW2A	MWZA	MW2A	MWZA	MW2A	MW2B	MW2B
Date:	10/84	1/85	4/85	7/85	10/85	12/86	4/84	8/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	14.8	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	14.8	0	0	

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

***************************************		***********						
Well Designation:	MW2B	MW2B	MW2B	MW2B	MW2B	MW2B	MW3	MW3
Date:	10/84	1/85	4/85	7/85	10/85	12/86	4/84	8/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	13	5
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	0	0	13	5

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		=========	=========	*********	=========	**********	=========	========
Well Designation:	MW3	MW3	MW3	MW3	MW3	MW4	MW4	MW4
Date:	10/84	1/85	4/85	7/85	10/85	4/84	8/84	10/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	<3.3	8.21	19.3	ND	ND	2
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	NĐ	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	8.2	19.3	0	0	2

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW4	MW4	MW4	MW4	MW4R	MW5	MW5	MW5
Date:	1/85	4/85	7/85	10/85	10/85	4/84	8/84	10/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	32	34.0	ND	11.4	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	NĐ	ND	ND	ND	ND	ND	ND
Phenol	ND	NO	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	32	34	0	11.4	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

***************************************						=========		
Well Designation:	MW5	MW5	MW5	MW5	MW6A	MW6A	MW6A	MW6A
Date:	1/85	4/85	7/85	10/85	4/84	8/84	10/84	1/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	19	ND	9	39
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	NĎ	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	30	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	19	0	39	39

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW6A	MW6A	MW6A	MW6A	MW6B	MW6B	MW6B	MW6B
Date:	4/85	7/85	10/85	10/85*	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)							##	
2-Chlorophenol	17	35.9	55.4	20.1	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	<2.7	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	<42.4	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	13	31.3	2.83	3.00	6.1	8.5	<1.5	134
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	30	67.2	58.2	23.1	6.1	8.5	0	134

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		**********						========
Well Designation:	MW7A	MW7A	MW7A	MW7A	MW7A	MW7A	MW7A	MW7A
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	12/86
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	2	ND	1	5	4.2	18.1	ND	9.34
2,4-Dichlorophenol	7	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	17	8	ND	ND	ND	3.99	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	26	8	1	5	4.2	22.1	0.0	9.3

ND Not Detected.

^{*} Replicate Sample.

, Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Hall Basismakiana	MW7B	MW7B	MW7B	MW7B	M₩7B	MW7B	MW7B	MW7E
Well Designation:								
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	12/86
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	2	103	21.9	25.8	16.3	56.3	NO
2,4-Dichlorophenol	ND	ND	76	264	46.5	125	ND	19.8
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	N
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	N
2,4-Dinitrophenol	ND	ND	11	ND	ND	389	9.7	N
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	N
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	N
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	N
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	N
Phenol	ND	ND	ND	ND	ND	ND	ND	N
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	N
Total Acid Compounds Analyzed	0	2	190	285.9	72.3	530.3	66	19.8

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

	Well Designation:	MW8A	MW8A	MW8A	ASWM	A8WM	MW8A	ASWM	A8WM	
	Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	12/86	
u	SEPA Priority Pollutant									
A	cid Extractable									
C	organic Compounds									
(Concentrations are in ug/L)									
2	:-Chlorophenol	93	9	24	8	17.3	27.3	39.5	<3.3	
2	,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	
2	,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	
4	,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND	
2	,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	
2	-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	
4	-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	
F	o-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND	
P	entachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	
P	henol	ND	ND	ND	4	ND	10.4	10.7	ND	
2	2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	
1	otal Acid Compounds Analyzed	93	9	24	12	17.3	37.7	50.2	0	

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	ASWM	MW8B	MW8B	MW8B	MW8B	MW8B	MW8B	MW8E
Date:	12/86*	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	3.72	ND	ND	ND	ND	ND	ND	NC
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	NC
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	NC
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	NO
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	NE
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	NC
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	NE
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	NE
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	NE
Phenol	ND	ND	ND	NĐ	ND	ND	ND	7.83
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	NE
Total Acid Compounds Analyzed	3.7	0	0	0	0	0	0	7.8

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW8B	MW9	MW9	MW9	MW9	MW9	MW9	MW9			
Date:	12/86	4/84	8/84	10/84	1/85	4/85	7/85	10/85			
USEPA Priority Pollutant											
Acid Extractable											
Organic Compounds											
(Concentrations are in ug/L)											
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND			
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND			
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND			
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND			
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND			
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND			
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND			
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND			
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND			
Phenol	ND	ND	ND	ND	ND	ND	ND	ND			
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND			
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	 0			

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

	=======================================							
Well Designation:	MW9	MW10	MW10	MW10	MW10	MW10	MW10	M₩10
Date:	12/86	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND ND	ND ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND ND
Pentachlorophenol	ND	ND	ND	2	ND	ND	ND	ND ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND ND
z,-,o-11 tentoropherot		nu	ND		NU	UN	NU	NU
Total Acid Compounds Analyzed	0	0	0	2	0	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

*****************		*********			=======================================			
Well Designation:	MW11A	MW11A	MW11A	MW11A	MW11A	MW11A	MW11A	MW11B
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	4/84
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	5	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	5	0	0	0	0	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW11B	MW118	MW11B	MW11B	MW11B	MW11B	MW11C	MW11C
Date:	8/84	10/84	1/85	4/85	7/85	10/85	1/85	4/85
JSEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND							
2,4-Dichlorophenol	ND							
2,4-Dimethylphenol	ND							
4,6-Dinitro-o-cresol	ND	ND	ND	NĐ	ND	ND	ND	ND
2,4-Dinitrophenol	ND							
2-Nitrophenol	ND							
4-Nitrophenol	ND							
p-Chloro-m-cresol	ND							
Pentachlorophenol	ND	1	ND	ND	ND	ND	ND	ND
Phenol	ND							
2,4,6-Trichlorophenol	ND							
Total Acid Compounds Analyzed	0	1	0	0	0	0	0	

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

	=========					=========	==========	========
Well Designation:	MW11C	MW11C	MW12	MW12	MW12	MW12	MW13	MW13
Date:	7/85	10/85	1/85	4/85	7/85	10/85	1/85	4/85
USEPA Priority Pollutant								•
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		=========					==========	=======
Well Designation:	MW13	MW13	MW14	MW14	MW14	MW14	MW15	MW15
Date:	7/85	10/85	1/85	4/85	7/85	10/85	1/85	4/85
USEPA Priority Pollutant			.,	.,	.,	.0,05	., 03	4,03
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	<3.3	ND	74	43.3	52.0	88.7	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	9.1	8.04	7.43	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	74	52.4	60	96.1	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW15	MW15	MW16	MW16	MW16	MW16	MW17	MW17
Date:	7/85	12/86	1/85	4/85	7/85	10/85	1/85	4/85
JSEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	9.12	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	2.87	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	9.1	2.9	0	0	0	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW17	MW17	MW18A	MW18A	MW18A	MW18A	MW18A	MW18B
Date:	7/85	10/85	1/85	4/85	7/85	10/85	12/86	1/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	7.34	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	3.31	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	NO
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	76.2	ND	ND	ND
Phenol	ND	ND	4	10	126	ND	ND	NC
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	NE
Total Acid Compounds Analyzed	0	0	4	10	212.9	0	0	(

ND Not Detected.

Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

***************************************					========		==========	
Well Designation:	MW18B	MW18B	MW18B	MW18B	MW19	MW19	MW19	MW19
Date:	4/85	7/85	10/85	12/86	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	<3.9	ND	ND	81	166	84.1	83.1
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	1.66	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	1.7	81	166	84.1	83.1

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

***************************************		=========		========				
Well Designation:	MW19	MW20	MW20	MW20	MW20	MW20	XFB1	XFB1
Date:	12/86	1/85	4/85	7/85	10/85	12/86	10/85	12/86
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	14.7	ND	ND	ND	ND	<3.5	ND	7.09
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	NĐ	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	NĐ	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	14.7	0	0	0	0	0	0	7.1

ND Not Detected.

^{*} Replicate Sample.

Table 4. Summary of Acid Extractable Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

=======================================			=========		========			=======
				LAB	LAB	METHOD	JAR	JAR
Well Designation:	XFB2	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
Date:	10/85	10/84	10/84	10/84	10/84	1/85	1/85	4/85
USEPA Priority Pollutant								
Acid Extractable								
Organic Compounds								
(Concentrations are in ug/L)								
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
Total Acid Compounds Analyzed	0	0	0	0	0	0	0	0

ND Not Detected.

^{*} Replicate Sample.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Date: 4/84 8/84 10/84 1/85 4/85 7/85 10,			*** - 4 -					
USEPA Priority Pollutrant Base/Neutral Extractable	Well Designation:	MW1A 4784	MW1A 8784	MW1A 10784	MW1A 1785	MW1A 4.785	MW1A 7/85	MW1A 10/85
Base/Neutral Extractable Organic Compounds Concentrations are in ug/L		4/04	0/04	10/04	1/03	4/63	1703	10/63
Concentrations are in ug/L	•							
Acenaphthere Acenaphthere Acenaphtylene Acenacy	Organic Compounds							
Acenapthylene Acenapthylene Anthrascene An	(Concentrations are in ug/L)							
Acenapthylene Acenapthylene Anthracene Benzidine Benzidi								
Anthriscene	Acenaphthene	ND	ND	ND	ND	ND	ND	ND
Senzidine	Acenapthylene	ND	ND	ND	ND	ND	ND	ND
Benzo (a) anthracene	Anthracene	ND	ND	ND	ND	ND	ND	ND
Benzo (a) pyrene	Benzidine	ND	ND	ND	ND	ND	ND	ND
Benzo (b) fluoroanthene	Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	ND
Benzo (ghi) perylene	Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	ND
Benzo (k) fluoranthene		ND	ND	ND	ND	ND	ND	ND
Bis (2-chloroethoxy) methane ND <	Benzo (ghi) perylene	ND	ND	ND	ND	ND	ND	NE
Bis (2-chloroethyl) ether	* *	ND	ND	ND	ND	ND	ND	NC
Bis (2-chloroisopropyl) ether	• • •	ND	ND	ND	ND	ND	ND	NE
Bis (2-ethylhexyl) phthalate	• •					ND	ND	NE
4-Bromophernyl prenyl ether ND N						ND	ND	NC
Butyl benzyl phthalate	• • • •							<10
2-Chloronphthalene ND N								NC
4-Chlorophenyl phenyl ether								NC
Chrysene								NC
Dibenzo (a,h) anthracene		_						NE
1,2-Dichlorobenzene	•							NC
1,3-Dichlorobenzene ND ND <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>NC</td>								NC
1,4-Dichlorobenzene ND ND <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ND</td>	•							ND
ND	•		_					ND
Diethyl phthalate	· •							ND
Dimethyl phthalate	•							NC
Di-n-buty phthalate	• •							NC
2,4-Dinitrotoluene ND	·							NC -10
2,6-Dinitrotoluene ND								<10
Di-n-octyl phthalate						·-		ND ND
1,2-Diphenylhydrazine ND ND </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>NO NO</td>								NO NO
Fluoranthene	• •							ND ND
Fluorene			_					NC NC
Hexachlorobenzene ND								ND ND
Hexachlorobutadiene ND ND ND ND ND ND ND ND ND N				-				NC
Hexachlorocyclopentadiene ND								NC
Hexachloroethane ND								ND
Indeno (1,2,3-c,d) pyrene	• •							ND
Isophorone ND								ND ND
Naphthalene ND								ND ND
Nitrobenzene ND	•							ND
n-Nitrosodimethylamine ND	•							NE
n-Nitrosodi-n-propylamine ND								ND
n-Nitrosodiphenylamine ND	•							ND
Phenanthrene ND	• • • •							ND
Pyrene ND ND ND ND ND ND	• •			-				NO
·								NE
••••••	•					_		NC
Total Base/Neutral Compounds Analyzed 6 1 2 104 0 14		· · · · · · · · · · · · · · · · · · ·						 C

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Date: SEPA Priority Pollutant ase/Neutral Extractable rganic Compounds Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene	4/84 ND ND ND	8/84 ND ND	10/84	1/85	4/85	7/85	10/8
ase/Neutral Extractable rganic Compounds Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND ND						
rganic Compounds Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND ND		• • • • • • • • • • • • • • • • • • • •				
Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND ND						
cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND ND						
cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND ND						
cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND ND		ND	ND	ND	ND	
nthracene enzidine enzo (a) anthracene enzo (a) pyrene	ND		ND	ND	ND	ND	j
enzidine enzo (a) anthracene enzo (a) pyrene		ND	ND	ND	ND	ND	,
enzo (a) anthracene enzo (a) pyrene	ND	ND	ND	ND	ND	ND	'n
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	i
	ND	ND	ND	ND	ND	ND	i
	ND	ND	ND	ND	ND	ND	,
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	j
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	i
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND ND	i
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	
is (2-ethylhexyl) phthalate	3	ND	1	11	ND	<10	<
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
nrysene	ND	ND	ND	ND	ND	ND	
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	
,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
iethyl phthalate	2	ND	ND	ND	ND	ND	
imethyl phthalate	ND	ND	ND	ND	ND	ND	
i-n-butyl phthalate	2	2	2	ND	ND	ND	
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
luoranthene	ND	ND	ND	ND	ND	ND	
Luorene	ND	ND	ND	ND	ND	ND	
exach lorobenzene	ND	ND	ND	ND	ND	ND	
exach l orobutadi ene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane	ND	ND	ND	ND	ND	ND	
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
sophorone	ND	ND	ND	ND	ND	ND	
aphthalene	ND	ND	ND	ND	ND	ND	
i trobenzene	ND	ND	ND	ND	ND	ND	
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
·Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
nenanthrene	ND	ND	ND	ND	ND	ND	
yrene	ND	ND	ND	ND	ND	ND	
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW2A	MW2A	MW2A	MW2A	MW2A	MW2A	MW2/
well besignation:	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant	4,04	0,04	10,04	., 05	4,03	1,05	10,0.
Base/Neutral Extractable							
Organic Compounds							
(Concentrations are in ug/L)							
Acenaphthene	ND	ND	ND	ND	ND	ND	N
Acenapthylene	ND	ND	ND	ND	ND	ND	N
Anthracene	ND	ND	ND	ND	ND	ND	N
Benzidine	ND	ND	ND	ND	ND	ND	N
Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
Benzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
Benzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
Benzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	N
Bis (2-ethylhexyl) phthalate	1	ND	1	ND	ND	<10	<1
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	N.
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
Chrysene	ND	ND	ND	ND	ND	ND	N
Dibenzo (a,h) anthracene 1,2-Dichlorobenzene	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	N
•	ND	ND	ND ND	ND	ND ND	ND	
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ND	ND	ND ND	ND	ND ND	ND	N N
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
Diethyl phthalate	3	ND ND	<1	ND	ND	ND	, N
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	N
Di-n-butyl phthalate	4	1	3	ND	ND	ND	N
2,4-Dinitrotoluene	ND	, ND	ND	ND	ND	ND	N N
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
Fluoranthene	ND	ND	ND	ND	ND	ND	
Fluorene	ND	ND	ND	ND	ND	ND	
Hexachlorobenzene	ND	ND	NĐ	ND	ND	ND	
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	N
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
Hexachloroethane	ND	ND	ND	ND	ND	ND	
Indeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
Isophorone	ND	ND	ND	ND	ND	ND	
Naph tha lene	ND	ND	ND	ND	ND	ND	1
Nitrobenzene	ND	ND	ND	ND	ND	ND	ı
n-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	,
n-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	,
Phenanthrene	ND	ND	ND	ND	ND	ND	1
Pyrene	ND	ND	ND	ND	ND	ND	1
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	, l
•••				• • • • • • • • • • • • • • • • • • • •			
Total Base/Neutral Compounds Analyzed	8	1	4	0	0	0	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MWZA	MW2B	MW2B	MW2B	MW2B	MW2B	MW2B
Date:	12/86	4/84	8/84	10/84	1/85	4/85	7/85
USEPA Priority Pollutant							
Base/Neutral Extractable							
Organic Compounds							
(Concentrations are in ug/L)							
Acenaphthene	ND						
Acenapthylene	ND	ND	ND	ND ND	ND ND	ND ND	ND ND
Anthracene	ND	ND	ND ND	ND	ND	ND ND	NC NC
Benzidine	ND ND	ND ND	ND	ND	ND	ND	NC
Benzo (a) anthracene	ND ND	ND ND	ND	ND	ND	ND	NC NC
Benzo (a) pyrene	ND	ND	ND	ND ND	. ND	ND	NC
Benzo (b) fluoroanthene Benzo (ghi) perylene	ND	ND	ND ND	ND	ND	ND	NC
Benzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	NC NC
	ND	ND	ND	ND	ND	ND	NC NC
Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	NE NE
Bis (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	NC
Bis (2-ethylhexyl) phthalate	ND	3	ND	1	11	ND	<10
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NE
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	NE
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	NE
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NC
Chrysene	ND	ND	ND	ND	ND	ND	NO
Dibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	NE
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NE
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NE
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NE
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	NC
Diethyl phthalate	ND	2	ND	ND	ND	ND	N
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	N
Di-n-butyl phthalate	ND	3	3	1	ND	ND	NE
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	N
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	N
Fluoranthene	ND	ND	ND	ND	ND	ND	N
Fluorene	ND	ND	ND	ND	ND	ND	N
Hexach Lorobenzene	ND	ND	ND	ND	ND	ND	N
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	NI
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	N
Hexachloroethane	ND	ND	ND	ND	ND	ND	N
Indeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	N
Isophorone	ND	ND	ND	ND	ND	ND	N
Naphthalene	ND	ND	ND	ND	ND	ND	N
Nitrobenzene	ND	ND	ND	ND	ND	ND	N
n-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	N
n-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND ND	N
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND ND	N
Phenanthrene	ND	ND	ND	ND	ND	ND ND	N
Pyrene	ND	ND	ND	ND	ND ND	ND ND	N N
1,2,4-Trichlorobenzene	ND	ND	ND	ND	NU	ND	N
Total Base/Neutral Compounds Analyzed	0	8	3	2	11	0	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designati	on: MW2B	MW2B	MW3	MW3	MW3	MW3	MW.
· ·	te: 10/85	12/86	4/84	8/84	10/84	1/85	4/8
SEPA Priority Pollutant							•
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND	ND	ND	ND	ND	ND	N
cenapthylene	ND	ND	ND	ND	ND	ND	N
inthracene	ND	ND	ND	ND	ND	ND	N
lenzidine	ND	ND	ND	ND	ND	ND	N
lenzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
lenzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
lenzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
lenzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	N
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	N
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	N
is (2-ethylhexyl) phthalate	<10	11.4	146	ND	1	45	N
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	1
hrysene	ND	ND	ND	ND	ND	ND	ı
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	
,2-Dichlorobenzene	ND	ND	1	ND	<1	ND	2.
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
iethyl phthalate	ND	ND	4	ND	ND	ND	<1
imethyl phthalate	ND	ND	ND	ND	ND	ND	
i-n-butyl phthalate	<10	ND	3	1	1	ND	<1
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	ND	ND	ND	ND	11	,
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	1
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	1
luoranthene	ND	ND	ND	ND	ND	ND	!
luorene	ND	ND	ND	ND	ND	ND	ı
exach l orobenzene	ND	ND	ND	ND	ND	ND	ı
exachloro butadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	1
exachloroethane	ND	ND	ND	ND	ND	ND	I
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	1
sophorone	ND	ND	ND	ND	ND	ND	
aph tha Lene	ND	ND	ND	ND	ND	ND	1
i trobenzene	ND	ND	ND	ND	ND	ND	I
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	1
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	I
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	1
henanthrene	ND	ND	ND	ND	ND	ND	1
yrene	ND	ND	ND	ND	ND	ND	1
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	,

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW3	MW3	MW4	MW4	MW4	MW4	MW4
Date:	7/85	10/85	4/84	8/84	10/84	1/85	4/85
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND						
cenapthylene	ND						
nthracene	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND
enzidine	ND ND	ND	ND	ND	ND	ND	ND ND
enzo (a) anthracene enzo (a) pyrene	ND	ND	ND	ND	ND	ND	ND ND
enzo (a) pyrene enzo (b) fluoroanthene	ND	ND	ND ND	ND	ND	ND	NC NC
enzo (ghi) perylene	ND						
enzo (k) fluoranthene	ND						
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N.C
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	NE NE
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	NC
is (2-ethylhexyl) phthalate	18.1	<11	2	13	1	ND	NE
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NC
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	NE
-Chloronaphthalene	ND	2.42	ND	ND	ND	ND	NC
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NE
nrysene	ND	ND	ND	ND	ND	ND	NC
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	NO
,2-Dichlorobenzene	2.56	4.07	16	5	1	12	9.1
,3-Dichlorobenzene	ND	ND	5	1	3	ND	3.2
,4-Dichlorobenzene	<4.4	<4.6	30	9	14	20	15.6
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	NC
iethyl phthalate	ND	ND	3	ND	ND	ND	NC
imethyl phthalate	ND	ND	ND	ND	ND	ND	NC
i-n-butyl phthalate	ND	ND	4	5	2	ND	NC
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	NC
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	NC
i-n-octyl phthalate	<10.0	ND	ND	ND	ND	ND	NC
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	NE
luoranthene	ND	ND	ND	ND	ND	ND	NE
luorene	ND	ND	ND	ND	ND	ND	NE
exach lorobenzene	ND	ND	ND	ND	ND	ND	NO
exachlorobutadiene	ND	ND	ND	ND	ND	ND	NE NE
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	IN.
exachloroethane	ND	ND	ND ND	ND	ND ND	ND	N
ndeno (1,2,3-c,d) pyrene sophorone	ND ND	ND ND	ND	ND ND	ND	ND ND	NC NC
aphthalene	ND	ND	2	ND	1	ND	N(
i trobenzene	ND	ND	ND	ND	ND	ND	NO
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	NE NE
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	NI NI
-Nitrosodi n propytamine	ND	ND	ND	ND	ND	ND	NI NI
henanthrene	ND	ND	ND	ND	ND	ND	N
yrene	ND	ND	ND	ND	ND	ND	N
,2,4-Trichlorobenzene	ND	ND	25	10	16	17	19.4
, _ ,		.,		· · ·		• •	• • • • • • • • • • • • • • • • • • • •

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds (Concentrations are in ug/L)	7/85 ND	ND N	ND N	4/84 ND	8/84 ND	ND ND ND ND ND	1/8 N N N
Base/Neutral Extractable Organic Compounds (Concentrations are in ug/L) Accenaphthene Accenapthylene Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethoxy) methane Bis (2-chloroisopropyl) ether Bis (3-chloroisopropyl) ether	ND N	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	N N
riganic Compounds Concentrations are in ug/L) cenaphthene cenapthylene inthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene eis (2-chloroethoxy) methane eis (2-chloroethoxy) methane eis (2-chloroisopropyl) ether eis (2-chloroisopropyl) ether eis (2-ethylhexyl) phthalate e-Bromophenyl phenyl ether eutyl benzyl phthalate e-Chlorophenyl phenyl ether eistyl benzyl phthalate e-Chlorophenyl phenyl ether eistyl benzyl phthalate e-Chlorobenzene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,3-Dichlorobenzene i,3-Dichlorobenzene ijethyl phthalate eisen-butyl phthalate eisen-butyl phthalate	ND N	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	N N
Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chlorophenyl phenyl ether thrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate imethyl phthalate	ND N	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	N N
cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chlorophenyl phenyl ether thrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate imethyl phthalate	ND N	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	N N
consphylene contracene conzidine conzo (a) anthracene conzo (a) pyrene conzo (b) fluoroanthene conzo (ghi) perylene conzo (k) fluoranthene conzo (k) fluoranthene conzo (k) fluoranthene conzo (conzocity) methane conzocity conzocity ether conzocity conzocity phylogical conzocity conzocit	ND N	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	N N
cenapthylene inthracene ienzidine ienzo (a) anthracene ienzo (a) pyrene ienzo (b) fluoroanthene ienzo (ghi) perylene ienzo (k) fluoranthene iis (2-chloroethoxy) methane iis (2-chloroethyl) ether iis (2-chloroisopropyl) ether iis (2-ethylhexyl) phthalate -Bromophenyl phenyl ether iityl benzyl phthalate -Chlorophenyl phenyl ether iitysene iibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,3-Dichlorobenzene i,3-Dichlorobenzidine iiethyl phthalate iimethyl phthalate iimethyl phthalate	ND N	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	N N
inthracene ienzidine ienzo (a) anthracene ienzo (a) pyrene ienzo (b) fluoroanthene ienzo (ghi) perylene ienzo (k) fluoranthene ienzo (k) fluoranthene iis (2-chloroethoxy) methane iis (2-chloroethyl) ether iis (2-chloroisopropyl) ether iis (2-ethylhexyl) phthalate -Bromophenyl phenyl ether iityl benzyl phthalate -Chlorophenyl phenyl ether iityl benzyl phthalate -Chlorophenyl phenyl ether iityl benzyl phthalate -Chlorophenyl phenyl ether iityl benzyl phthalate -Chlorobenzene ijbenzo (a,h) anthracene -,2-Dichlorobenzene -,3-Dichlorobenzene -,3-Dichlorobenzene -,3-Dichlorobenzidine iitethyl phthalate iimethyl phthalate iimethyl phthalate	ND N	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND	N N
enzidine enzo (a) anthracene enzo (a) pyrene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether thrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene i,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND N	ND ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND	ND ND ND	ND ND	1
enzo (a) anthracene enzo (a) pyrene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate imethyl phthalate i-n-butyl phthalate	ND N	ND ND ND ND ND	ND ND ND ND	ND ND ND	ND ND	ND	
enzo (a) pyrene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether thrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene i,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND ND ND ND ND	ND ND ND	ND ND	ND		
enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND ND ND ND ND <10.0	ND ND ND ND	ND ND ND	ND		LIP.	ļ
enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether thrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene i,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND ND ND ND <10.0	ND ND ND	ND ND		ND	ND	Į
enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND ND ND ND <10.0	ND ND ND	ND	ND		ND	1
is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND ND ND <10.0 ND	ND ND	-		ND	ND	I
is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,4-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND ND <10.0 ND	ND		ND	ND	ND	
is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND <10.0 ND		ND	ND	ND	ND	
is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate i-n-butyl phthalate	<10.0 ND	4	ND	NĐ	ND	ND	
-Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate i-n-butyl phthalate		ND	<10	6	ND	1	
-Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate i-n-butyl phthalate	446	ND	ND	ND	ND	ND	
-Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzene iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
,4-Dichlorobenzene ,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	10.6	9.48	9.14	1	ND	ND	
,3-Dichlorobenzidine iethyl phthalate imethyl phthalate i-n-butyl phthalate	3.12	2.77	2.81	ND	ND	ND	
iethyl phthalate imethyl phthalate i-n-butyl phthalate	18.2	16.6	18	1	ND	ND	
imethyl phthalate i-n-butyl phthalate	ND	ND	ND	ND	ND	ND	
i-n-butyl phthalate	ND	ND	ND	3	ND	<1	
• •	ND	ND	ND	ND	ND	ND	
4-Dinitrotoluene	ND	<10	<10	3	1	1	
, + billici ococacine	ND	ND	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
luoranthene	ND	ND	ND	ND	ND	NĐ	
luorene	ND	ND	ND	ND	ND	ND	
exach l orobenzene	ND	ND	ND	ND	NĐ	ND	
exachlorobutadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane	ND	ND	ND	ND	ND	ND	
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
sophorone	ND	ND	ND	ND	ND	ND	
aph tha lene	ND	<1.6	<1.6	ND	ND	ND	
itrobenzene	ND	ND	ND	ND	ND	ND	
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
henanthrene	ND	ND	ND	ND	ND	ND	
yrene	ND	ND	ND	ND	ND	ND	
,2,4-Trichlorobenzene	19.9	21.1	21.9	1	ND	ND	
Total Base/Neutral Compounds Analyzed	51.8	50	51.9	15	1	2	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Date: EPA Priority Pollutant	/. / MP	7.05	40.05	1 .01	0.407	40.404	4 .05
cra ri ioi ity rottutuit	4/85	7/85	10/85	4/84	8/84	10/84	1/85
se/Neutral Extractable							
ganic Compounds							
concentrations are in ug/L)							
enaph thene	ND	ND	ND	ND	ND	ND	NC
enapthylene	ND	ND	ND	ND	ND	ND	NC
thracene	ND	ND	ND	ND	ND	ND	NC
nzidine	ND	ND	ND	ND	ND	ND	N
nzo (a) anthracene	ND	ND	ND	ND	ND	ND	NO
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	NO
nzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
nzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	NE
s (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
s (2-chloroethyl) ether	NĐ	ND	ND	ND	ND	ND	N
s (2-chloroisopropyl) ether	ND	ND	ND	NĐ	ND	ND	N
s (2-ethylhexyl) phthalate	ND	<10.0	ND	ND	ND	988	N
Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
ityl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
Chloronaphthalene	ND	ND	ND	ND	ND	ND	N
Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
rysene	ND	ND	ND	ND	ND	ND ND	A
benzo (a,h) anthracene	ND ND	NĐ ND	ND ND	ND 14	ND 2	18	24.
2-Dichlorobenzene	ND	ND	ND	ND	ND	10	3.
3-Dichlorobenzene 4-Dichlorobenzene	ND	ND	ND	17	7	18	29.
3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	29. N
ethyl phthalate	ND	ND	ND	8	1	3	N N
methyl phthalate	ND	ND	ND	ND	ND	ND	N
-n-butyl phthalate	ND	ND	ND	ND	2	11	 N
4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
-n-octyl phthalate	ND	ND	ND	ND	ND	10	N
2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	N
uoranthene	ND	ND	ND	ND	ND	ND	N
uorene	ND	ND	ND	ND	ND	ND	N
exach l orobenzene	ND	ND	ND	ND	ND	ND	
exachlorobutadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	1
exachloroethane	ND	NĐ	ND	ND	ND	ND	1
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	1
sophorone	ND	ND	ND	ND	ND	ND	l l
phthalene	ND	ND	ND	ND	ND	4	1
trobenzene	ND	NĐ	ND	ND	ND	ND	ı
Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	•
Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
enanthrene	ND	ND	ND	ND	ND	ND	1
rene	ND	ND	ND	ND	ND	ND	1
2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Date: SEPA Priority Pollutant ase/Neutral Extractable organic Compounds Concentrations are in ug/L)	4/85	7/85	10/85	1/85	4/85	7/85	
ase/Neutral Extractable rganic Compounds					4,03	.,	10/85
rganic Compounds							
cenaphthene	ND	ND	ND	ND	ND	ND	ND
cenapthylene	ND	ND	ND	ND	ND	ND	ND
nthracene	ND	ND	ND	ND	ND	ND	ND
enzidine	ND	ND	ND	ND	ND	ND	ND
enzo (a) anthracene	ND	ND	ND	ND	ND	ND	ND
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	ND
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	ND
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	ND
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	ND
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	ND
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	ND
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	ND
is (2-ethylhexyl) phthalate	ND	24.2	ND	ND	ND	ND	ND
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	ND
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	ND
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	ND
hrysene	ND	ND	ND	ND	ND	ND	ND
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	ND
,2-Dichlorobenzene	ND	19.3	15.6	13	11.5	10.0	8.89
,3-Dichlorobenzene	ND	ND	<1.9	ND	<1.9	ND 10.2	ND O 47
,4-Dichlorobenzene	ND	19.7	16.0	14	10.5	10.2	9.63
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND
iethyl phthalate	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
imethyl phthalate i-n-butyl phthalate	ND	<11.2	ND	ND	ND	ND ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
i-n-octyl phthalate	ND	<11.2	ND	ND	ND	ND	ND
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	ND
Luoranthene	ND	ND	ND	ND	ND	ND	ND
Luorene	ND	ND	ND	ND	ND	ND	ND
lexachlorobenzene	ND	ND	ND	ND	ND	ND	ND
iexachlorobutadiene	ND	ND	ND	ND	ND	ND	NC
lexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	NC
lexachloroethane	ND	ND	ND	ND	ND	ND	NC
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	NC
sophorone	ND	ND	ND	ND	ND	ND	NE
laphthalene	4.9	4.04	3.79	ND	ND	ND	NC
itrobenzene	ND	15.8	ND	ND	ND	ND	NE
n-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	NC
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	NE
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	NE
henanthrene	ND	ND	ND	ND	ND	ND	NC
yrene	ND	ND	ND	ND	ND	ND	NO
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	NC

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW7A	MW7A	MW7A	MW7A	MW7A	MW7A	MW7
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/8
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
	• • • • • • • • • • • • • • • • • • • •					•••••	
cenaphthene	ND	ND	ND	ND	ND	ND	N
cenapthylene	ND	ND	ND	ND	ND	ND	N
nthracene	ND	ND	ND	ND	ND	ND	N
enzidine	ND	ND	ND	ND	ND	ND	N
enzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	N
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
is (2-chloroethyl) ether	ND	ND	ND	NĐ	ND	ND	1
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	1
is (2-ethylhexyl) phthalate	58	4	8	ND	ND	<10.0	<
-Bromophenyl phenyl ether	NĐ	ND	ND	ND	ND	ND	1
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	1
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	- 1
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	1
hrysene	ND	ND	ND	ND	ND	ND	
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	1
,2-Dichlorobenzene	ND	ND	1	7	2.6	4.03	ı
,3-Dichlorobenzene	ND	ND	<1	4.7	ND	3.29	
,4-Dichlorobenzene	14	2	5	11.2	12.8	5.94	1
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	<4
iethyl phthalate	3	ND	1	ND	ND	ND	1
imethyl phthalate	ND	ND	ND	ND	ND	ND	1
i-n-butyl phthalate	3	4	7	4.4	ND	ND	1
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	1
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	i
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	i
Luoranthene	ND	ND	ND	ND	ND	ND	
luorene	ND	ND	ND	ND	ND	ND	i
exachlorobenzene	ND	ND	ND	ND	ND	ND	·
exach l orobutadiene	ND	ND	ND	ND	ND	ND	· ·
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	· ·
exachloroethane	ND	ND	ND	ND	ND	ND	
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	· · · · · · · · · · · · · · · · · · ·
sophorone	ND	ND	ND	ND	ND	ND	
aphthalene	ND ND	ND	1 1	51.9	9	<1.6	
itrobenzene	ND	ND	•		ND		
			ND	ND		ND	l
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
henanthrene	ND	ND	ND	ND	ND	ND	
yrene	ND	ND	ND	ND	ND	ND	. !
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	
••							

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds (Concentrations are in ug/L) Acenaphthene Acenaphthene Acenaphtylene Anthracene Benzo (a) anthracene Benzo (a) pyrene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethoxy) methane Bis (2-chloroisopropyl) ether Bis (2-chloroisopropyl)	12/86 ND	A/84 ND	8/84 ND	ND N	1/85 ND	4/85 ND	7/85 NC NC NC NC NC NC NC
Gase/Neutral Extractable Organic Compounds (Concentrations are in ug/L) Accenaphthene Accenaphtylene Anthracene Genzidine Genzo (a) anthracene Genzo (b) fluoroanthene Genzo (ghi) perylene Genzo (k) fluoranthene Gis (2-chloroethoxy) methane Gis (2-chloroethyl) ether Gis (2-chloroisopropyl) ether Gis (2-chlorobenyl phenyl ether Gis (2-chlorophenyl phenyl ether Gibenzo (a,h) anthracene Gis (3-Dichlorobenzene Gis (ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	HI NI NI NI NI NI NI NI NI NI NI NI NI NI
Concentrations are in ug/L) Accenaphthene Accenapthylene Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate B-Bromophenyl phenyl ether Butyl benzyl phthalate B-Chlorophenyl phenyl ether B-Chlorobenzene B-C-Dichlorobenzene B-C-Dichlorobe	ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	NI NI NI NI NI NI NI NI NI
Accenaphthene Accenaphtylene Accenaphtylene Accenaphtylene Accenaphtylene Accenaphtylene Accenaphtylene Accenaphtylene Accenacy (a) anthracene Accenacy (b) fluoroanthene Accenacy (ghi) perylene Acce	ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	и и и и и и и
Acenaphthene Acenaphtylene Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate B-Bromophenyl phenyl ether Butyl benzyl phthalate B-Chlorophenyl phenyl ether B-Chlorobenzene B-C-Dichlorobenzene	ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	NI NI NI NI NI NI NI NI NI
Acenaphthene Acenaphthylene Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate A-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloroaphthalene A-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 2,3-Dichlorobenzidine Diethyl phthalate Diethyl phthalate Diethyl phthalate Diethyl phthalate Dien-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	H(H(H(H(H(H(H(H(H(H(H(H(H(H
Acenapthylene Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethoxy) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloroaphthalene 4-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Dimethyl phthalate Diin-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND N	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	H(H(H(H(H(H(H(H(H(H(H(H(H(H
Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethoxy) methane Bis (2-chloroisopropyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 4-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Dimethyl phthalate Din-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND N	ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND	ND N	ND ND ND ND ND ND ND ND	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate 6-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 6-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzene Diethyl phthalate Dimethyl phthalate Dimethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND N	ND N	ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	NI NI NI NI NI NI
Benzo (a) pyrene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 4-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzidine Dimethyl phthalate Dimethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND N	ND N	ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND	ND ND ND ND ND ND	NI NI NI NI NI
Benzo (a) pyrene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 4-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,4-Dichlorobenzidine Dimethyl phthalate Dimethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND N	ND N	ND ND ND ND ND ND ND 13 ND	ND ND ND ND ND ND ND 2	ND ND ND ND ND ND ND	ND ND ND ND ND ND	NI NI NI NI
Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroisopropyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate G-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene G-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND ND ND ND <5.6 28.0 ND ND	ND ND ND ND ND ND ND ND	ND ND ND ND 13 ND	ND ND ND ND ND 2	ND ND ND ND ND	ND ND ND ND	NI NI NI NI
Genzo (k) fluoranthene Gis (2-chloroethoxy) methane Gis (2-chloroethyl) ether Gis (2-chloroisopropyl) ether Gis (2-chloroisopropyl) ether Gis (2-chlylexyl) phthalate G-Bromophenyl phenyl ether Gutyl benzyl phthalate 2-Chloronaphthalene G-Chlorophenyl phenyl ether Chrysene Gibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzidine Giethyl phthalate Gimethyl phthalate Gin-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND ND ND V5.6 28.0 ND ND	ND ND ND ND ND ND ND	ND ND ND 13 ND	ND ND ND ND 2	ND ND ND ND 9.2	ND ND ND ND	NI NI NI
Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-chloroisopropyl) ether Bis (2-chlylexyl) phthalate G-Bromophenyl phenyl ether Butyl benzyl phthalate C-Chloronaphthalene G-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzidine Diethyl phthalate Diethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND ND S5.6 28.0 ND ND	ND ND ND ND ND ND	ND ND ND 13 ND ND	ND ND ND 2 ND	ND ND ND 9.2	ND ND ND	N
Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate 4-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 4-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND ND <5.6 28.0 ND ND ND	ND ND ND ND ND	ND ND 13 ND	ND ND 2 ND	ND ND 9.2	ND ND	N
Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate G-Bromophenyl phenyl ether Butyl benzyl phthalate C-Chloronaphthalene G-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND <5.6 28.0 ND ND	ND ND ND ND	ND 13 ND ND	ND 2 ND	ND 9.2	ND	
Bis (2-ethylhexyl) phthalate 6-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene 6-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 2,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	<5.6 28.0 ND ND	ND ND ND ND	13 ND ND	2 ND	9.2		N
A-Bromophenyl phenyl ether Butyl benzyl phthalate 2-Chloronaphthalene A-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	28.0 ND ND ND	ND ND ND	ND ND	ND		<10	
Sutyl benzyl phthalate 2-Chloronaphthalene 3-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 3,3-Dichlorobenzene 0,4-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate 0:-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND ND ND	ND ND	ND		ΝD		<10.
2-Chloronaphthalene 6-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 3,3-Dichlorobenzene 0,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate 0:-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND ND	ND			HU	ND	N
c-Chlorophenyl phenyl ether Chrysene Dibenzo (a,h) anthracene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate 1:-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND		MD	ND	ND	ND	N
chrysene dibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzidine diethyl phthalate dimethyl phthalate di-n-butyl phthalate ,4-Dinitrotoluene ,6-Dinitrotoluene		ND	nv	ND	ND	ND	N
ribenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzidine riethyl phthalate rimethyl phthalate ri-n-butyl phthalate ,4-Dinitrotoluene ,6-Dinitrotoluene	ND		ND	ND	ND	ND	N
,2-Dichlorobenzene ,3-Dichlorobenzene ,4-Dichlorobenzene ,3-Dichlorobenzidine biethyl phthalate bimethyl phthalate bi-n-butyl phthalate ,4-Dinitrotoluene		ND	ND	ND	ND	ND	N
,3-Dichlorobenzene 1,4-Dichlorobenzene 3,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
,4-Dichlorobenzene 3,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	6.43	44	34	102	111	52.8	N
3,3-Dichlorobenzidine Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	5.41	ND	ND	5	6.2	3.3	N
Diethyl phthalate Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	7.46	738	605	1,000	1,100	452	97
Dimethyl phthalate Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
Di-n-butyl phthalate 2,4-Dinitrotoluene 2,6-Dinitrotoluene	<9.9	4	ND	ND	ND	ND	N
2,4-Dinitrotoluene 2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
2,6-Dinitrotoluene	<9.9	2	3	3	ND	<10	N
•	ND	ND	ND	ND	ND	ND	N
	ND	ND	ND	ND	ND	ND	N
• •	ND ND	ND ND	ND	ND ND	3.1	ND	N
,2-Diphenylhydrazine Huoranthene	ND	ND	ND ND		ND	ND	N
Luorene	ND	ND	ND	ND ND	ND	ND	N N
iexach Lorobenzene	ND	ND	ND	ND	ND ND	ND	
exachlorobutadiene	ND	ND	ND	ND	ND	ND ND	N N
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND ND	N
lexachloroethane	ND	ND	ND	ND	ND	ND	N
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	N
sophorone	ND	ND	ND	ND	ND	ND	N
laphthalene	ND	274	ND	ND	844	20	1,74
litrobenzene	ND	58	133	706	130	10.7	91
n-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	N
n-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	N
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	N
Phenanthrene	ND	ND	ND	ND	ND	ND	N.
Pyrene	ND	ND	ND	ND	ND	ND	N
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	N
Total Base/Neutral Compounds Analyzed	47.3	1,120	788	1,818	2,203.5	538.8	3,62

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW7B	MW7B	MW8A	MW8A	MW8A	A8WM	MW8
Date:	10/85	12/86	4/84	8/84	10/84	1/85	4/8
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND	ND	ND	ND	ND	ND	N
cenapthylene	ND	ND	ND	ND	ND	ND	N
inthracene	ND	ND	ND	ND	ND	ND	N
enzidine	ND	ND	ND	ND	ND	ND	N
enzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	N.
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	À
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
enzo (k) fluoranthene	ND	ND	ND	ND	ND ND	ND ND	N N
is (2-chloroethoxy) methane	ND ND	ND ND	ND ND	ND ND	ND ND	ND	, N
is (2-chloroethyl) ether	ND ND	ND	ND	ND	ND	ND	N
is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate	<10	ND	3	ND	127	13.7	,
-Bromophenyl phenyl ether	ND	ND	ИD	ND	ND	ND	i
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	i
P-Chloronaphthalene	ND	ND	ND	ND	ND	ND	,
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	i
hrysene	ND	ND	ND	ND	ND	ND	·
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	i
,2-Dichlorobenzene	45.6	36.1	59	4	11	6.1	6.
,3-Dichlorobenzene	ND	3.02	ND	ND	1	ND	
,4-Dichlorobenzene	399	591	78	5	15	8.2	8.
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	1
iethyl phthalate	ND	ND	39	ND	<1	ND	1
imethyl phthalate	ND	ND	ND	ND	ND	ND	1
i-n-butyl phthalate	ND	ND	ND	3	10	ND	1
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	1
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	1
i-n-octyl phthalate	ND	ND	ND	ND	3	ND)
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	J
luoranthene	ND	ND	ND	ND	ND	ND	ı
luorene	ND	ND	ND	ND	ND	ND	ı
lexach l orobenzene	ND	ND	ND	ND	ND	ND	ı
lexachlorobutadiene	ND	ND	ND	ND	ND	ND	1
lexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	1
lexachloroethane	ND	ND	ND	ND	ND	ND	ı
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	ı
sophorone	ND	ND	ND	ND	ND	ND	į
aphthalene	434	ND	ND	ND	<1	2.6	2
itrobenzene	23.3	ND	ND	ND	ND	ND	١
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ļ
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
Phenanthrene	ND	ND	ND	ND	<1	ND	
Pyrene	ND	ND	ND	ND	ND	ND	
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	ASHM	ASHM	MW8A	MW8AR	MW8B	MW8B	8WM
Date:	7/85	10/85	12/86	12/86	4/84	8/84	10/8
SEPA Priority Pollutant							
ese/Neutral Extractable							
ganic Compounds							
Concentrations are in ug/L)							
1.1							
cenaphthene	ND	ND	ND	ND	ND	ND	,
cenapthylene	ND	ND	ND	ND	ND	ND	
nthracene	ND	ND	ND	ND	ND	ND	
enzidine	ND	ND	ND	ND	ND	ND	
enzo (a) anthracene	ND	ND ND	ND	ND	ND	ND	
enzo (a) pyrene	ND		ND	ND	ND	ND	1
enzo (b) fluoroanthene enzo (ghi) perylene	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1
enzo (gni) perytene enzo (k) fluoranthene	ND	ND ND	ND	ND	ND ND	ND	1
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	
is (2-ethylhexyl) phthalate	<10.0	19.0	<10	<10	2	ND	
Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	
Chloronaphthalene	ND	ND	ND	ND	ND	ND	
Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
rysene	ND	ND	ND	ND	ND	ND	
benzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	
2-Dichlorobenzene	17.6	6.07	3.06	3.56	ND	ND	
3-Dichlorobenzene	<1.9	ND	ND	ND	ND	ND	
4-Dichlorobenzene	24.3	8.44	<4.4	5.30	ND	ND	
3-Dichtorobenzidine	ND	ND	ND	ND	ND	ND	
ethyl phthalate	ND	ND	<10	ND	3	ND	
methyl phthalate	ND	ND	ND	ND	ND	ND	
-n-butyl phthalate	ND	ND	<10	<10	2	3	
4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
.6-Dinitrotolu ene	ND	ND	ND	ND	ND	ND	
-n-octyl phthalate	ND	<10	ND	ND	ND	ND	
2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
uoranthene	ND	ND	ND	ND	ND	ND	
uorene	ND	ND	ND	ND	ND	ND	
exachlorobenzene	ND	ND	ND	ND	ND	ND	
exachlorobutadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane	ND	ND	ND	ND	ND	ND	
deno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
ophorone	ND	ND	ND	ND	ND	ND	
phthalene	<1.9	ND	ND	ND	ND	ND	
trobenzene	ND	ND	ND	ND	ND	ND	
Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
enanthrene	ND	ND	ND	ND	ND	ND	
/rene	ND	ND	ND	ND	ND	ND	
2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW8B	MW8B	MW8B	MW8B	MW8B	MW9	MW
Date:	1/85	4/85	7/85	10/85	12/86	4/84	8/8
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND	ND	ND	ND	ND	ND	N
cenapthylene	ND	ND	ND	ND	ND	ND	N
nthracene	ND	ND	ND	ND	ND	ND	N
enzidine	ND	ND	ND	ND	ND	ND	N
enzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	N
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	N
is (2-chloroisopropyl) ether	ND 15.0	ND	ND	ND	ND	ND	N
is (2-ethylhexyl) phthalate	15.8	ND	<12.5	<10	ND	1	N
-Bromophenyl phenyl ether	D	ND ND	ND ND	ND ND	ND ND	ND ND	N
utyl benzyl phthalate	ND ND	ND	ND	ND	ND		N N
-Chloronaphthalene -Chlorophenyl phenyl ether	ND ND	ND ND	ND ND	ND	ND ND	ND ND	, , , , , , , , , , , , , , , , , , ,
hrysene	ND	ND	ND	ND	ND	ND	,
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	,
,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	,
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	N
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
iethyl phthalate	ND	ND	ND	ND	ND	4	N
imethyl phthalate	ND	ND	ND	ND	ND	ND	 N
i-n-butyl phthalate	8.1	ND	ND	<10	ND	2	•
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	N
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	N
luoranthene	ND	ND	ND	ND	4.45	ND	1
luorene	ND	ND	ND	ND	NĐ	ND	N
exach l orobenzene	ND	ND	ND	ND	ND	ND	1
exachlorobutadiene	ND	ND	ND	ND	ND	ND	1
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane exachloroethane	ND	ND	ND	ND	ND	ND	1
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
sophorone	ND	ND	ND	ND	ND	ND	1
aph tha lene	ND	ND	ND	ND	ND	ND	1
i trobenzene	ND	ND	ND	ND	ND	ND	1
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ı
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	ı
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ı
henanthrene	ND	ND	ND	ND	ND	ND	1
yrene	ND	ND	ND	ND	ND	ND	ı
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	1
(22)					· · · · · · · · · · · · · · · · · · ·		
Total Base/Neutral Compounds Analyzed	23.9	0	0	0	4.5	7	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

					MW9		MW
Dat	e: 10/84	1/85	4/85	7/85	10/85	12/86	4/8
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND	ND	ND	ND	ND	ND	
cenapthylene	ND	ND	ND	ND	ND	ND	
nthracene	ND	ND	ND	ND	ND	ND	
enzidine	ND	ND	ND	ND	ND	ND	
enzo (a) anthracene	ND	ND	ND	ND	ND	ND	
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	
is (2-ethylhexyl) phthalate	1	17	ND	<10.1	ND	ND	
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
hrysene	ND	ND	ND	ND	ND	ND	
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	
,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
iethyl phthalate	<1	ND	ND	ND	ND	ND	
imethyl phthalate	ND	ND	ND	ND	ND	ND	
i-n-butyl phthalate	2	ND	ND	<10.1	ND	ND	
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
luoranthene	ND	ND	ND	ND	ND	ND	
luorene	ND	ND	ND	ND	ND	ND	
exach l orobenzene	ND	ND	ND	ND	ND	ND	
exachlorobutadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane	ND	ND	ND	ND	ND	ND	
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
sophorone	ND	ND	ND	ND	ND	ND	
aph tha lene	ND	NĐ	ND	ND	ND	ND	
itrobenzene	ND	ND	ND	ND	ND	ND	
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodi-n-propylamine	ND	ND	ND	ND	NĐ	ND	
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
henanthrene	ND	ND	ND	ND	ND	ND	
yrene	ND	ND	ND	ND	ND	ND	
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation: Date:	MW10 8/84	MW10 10/84	MW10 1/85	MW10 4/85	MW10 7/85	MW10 10/85	MW11A 4/84
SEPA Priority Pollutant	0,04	10,04	1,05	4,03	,,03	10,03	4/0-
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND	ND	ND	ND	ND	ND	ND
cenapthylene	ND	ND	ND	ND	ND	ND	ND
nthracene	ND	ND	ND	ND	ND	ND	ND
enz i di ne	ND	ND	ND	ND	ND	ND	ND
enzo (a) anthracene	ND	ND	ND	NĐ	ND	ND	NO
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	ND
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	ND
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	ND
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	ND
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	ND
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	NC
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	NĐ	ND
is (2-ethylhexyl) phthalate	ND	3	19	ND	<10.0	ND	345
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NC
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	NC
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NC
hrysene	ND	ND	ND	ND	ND	ND	NC
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	NC
,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NO
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	7
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND
iethyl phthalate	ND	1	ND	ND	ND	ND	2
imethyl phthalate	ND	ND	ND	ND	ND	ND	NC
i-n-butyl phthalate	2	2	12	ND	ND	<10	3
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	NO
i-n-octyl phthalate	ND	<1	ND	ND	ND	ND	3
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	ND
luoranthene	ND	ND	ND	ND	ND	ND	NC
luorene	ND	ND	ND	ND	ND	ND	NC
exachlorobenzene	ND	ND	ND	ND	ND	ND	NC
exachlorobutadiene	ND	ND	ND	ND	ND	ND	NC
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	NE
exachloroethane	ND	ND	ND	ND	ND	ND	N
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	NE
sophorone	ND	ND	ND	ND	ND	ND	NC
aphthalene	ND	ND	ND	ND	ND	ND	NE
itrobenzene	ND	ND	ND	ND	ND	ND	NC
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	NE
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	NC
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	NC
henanthrene	ND	ND	ND	ND	<5.4	ND	N
yrene	ND	ND	ND	ND	ND	ND	NI
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	N

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

₩ell Designa			MW11A	MW11A	MW11A	MW11A	MW11
	Date: 8/8	4 10/84	1/85	4/85	7/85	10/85	4/8
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
	N	D ND	NO.	ND	ND.	ND	
cenaphthene cenapthylene	N		ND ND	ND ND	ND ND	ND	N
nthracene	N		ND	ND	ND	ND ND	N
enzidine	N		ND	ND	ND	ND	N
enzo (a) anthracene	N		ND	ND	ND	ND	N
enzo (a) pyrene	N		ND	ND	ND	ND	N
enzo (b) fluoroanthene	N.		ND	ND	ND	ND	N
enzo (ghi) perylene	N.		ND	ND	ND	ND	N
enzo (k) fluoranthene	N		ND	ND	ND	ND	N
is (2-chloroethoxy) methane	N		ND	ND	ND	ND	N
is (2-chloroethyl) ether	N		ND	ND	ND	ND	N.
is (2-chloroisopropyl) ether	Ň		ND	ND	NĐ	ND	N
is (2-ethylhexyl) phthalate	!	5 ND	ND	ND	<10.0	<10	N
-Bromophenyl phenyl ether	N	D ND	ND	ND	NĐ	ND	N
utyl benzyl phthalate	N	D ND	ND	ND	ND	ND	N
-Chloronaphthalene	N	D ND	ND	ND	ND	ND	N
-Chlorophenyl phenyl ether	N	D ND	ND	ND	ND	ND	
hrysene		1 ND	ND	ND	ND	ND	•
ibenzo (a,h) anthracene	N	D ND	ND	ND	ND	ND	N
,2-Dichlorobenzene	N	D ND	ND	ND	ND	ND	N
,3-Dichlorobenzene	N	D ND	ND	ND	ND	ND	N
,4-Dichlorobenzene	N		ND	ND	ND	ND	N
,3-Dichlorobenzidine	N		ND	ND	ND	ND	N
iethyl phthalate		1 ND	ND	ND	ND	ND	2
imethyl phthalate	N		ND	ND	ND	ND	N
i-n-butyl phthalate		4 ND	ND	ND	ND	<10	
,4-Dinitrotoluene	N		ND	ND	ND	ND	N
,6-Dinitrotoluene	N		ND	ND	ND	ND	N
i-n-octyl phthalate		1 ND	ND	ND	ND	ND	N
,2-Diphenylhydrazine	N		ND	ND	ND	ND	N
Lucranthene		1 ND	ND	ND	ND	ND	N
luorene	N		ND	ND	ND	ND	N
exachlorobenzene	N		ND	ND	ND	ND	N
exachlorobutadiene exachlorocyclopentadiene	Ni Ni		ND	ND	ND	ND	N
exachtorocyctopentachene exachtoroethane	N		ND	ND	ND	ND	ı.
ndeno (1,2,3-c,d) pyrene	N		ND ND	ND ND	ND	ND	
sophorone	N		ND	ND ND	ND ND	ND	N
aphthalene	N		ND	ND	ND	ND ND	•
itrobenzene	N		ND	ND	ND	ND	
-Nitrosodimethylamine	N		ND	ND	ND	ND	, N
-Nitrosodi-n-propylamine	N		ND	ND	ND	ND	
-Nitrosodiphenylamine	N	-	ND	ND	ND	ND	, N
henanthrene		1 ND	ND	ND	ND	ND	, I
yrene	N		ND	ND	ND	ND	N
,2,4-Trichlorobenzene	N		ND	ND	ND	ND	, N

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW11B	MW11B	MW11B	MW11B	MW11B	MW11B	MW11
Date:	8/84	10/84	1/85	4/85	7/85	10/85	1/8
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
1.1		.4					
cenaphthene	ND	<1 	ND	ND	ND	ND	
cenapthylene	ND ND	ND	ND	ND	ND	ND	
nthracene enzidine	ND	ND	ND	ND	<1.9	ND	1
	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
enzo (a) anthracene enzo (a) pyrene	ND	ND ND	ND ND	ND	ND ND	ND ND	I
enzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	1
enzo (ghi) perylene	ND	ND	ND	ND	ND	ND	
enzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	
is (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	
is (2-ethylhexyl) phthalate	44	1	ND	ND	<10	ND	
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
hrysene	ND	ND	ND	ND	ND	ND	
ibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	
,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
iethyl phthalate	ND	ND	ND	ND	ND	ND	
imethyl phthalate	ND	ND	ND	ND	ND	ND	
i-n-butyl phthalate	3	2	ND	ND	<10	31.2	
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
i-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
,2-Diphenylhydrazine	ND	ND	ND	ND	NĐ	ND	
luoranthene	ND	ND	ND	ND	ND	ND	
luorene	ND	ND	ND	ND	<1.9	ND	
exachlorobenzene	ND	ND	ND	ND	ND	ND	
exachlorobutadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane	ND	ND	ND	ND	ND	ND	
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
sophorone aphthalene	ND	ND ND	ND	ND	<2.2	ND	
itrobenzene	ND ND	ND ND	ND ND	ND ND	<1.6 ND	ND ND	
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
henanthrene	ND	<1	ND	ND	ND	ND	
yrene	ND	ND	ND	ND	ND	ND ND	
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW11C	MW11C	MW11C	MW12	MW12	MW12	MW12
Date:	4/85	7/85	10/85	1/85	4/85	7/85	10/8
USEPA Priority Pollutant							
Base/Neutral Extractable							
Organic Compounds							
(Concentrations are in ug/L)							
A	ND	ND	ND	47	7 7	9 00	42
Acenaphthene	ND	ND	ND	13	7.3	8.98	12.3
Acenapthylene	ND ND	ND <1.9	ND ND	ND ND	ND ND	ND ND	N
Anthracene Benzidine	ND	ND	ND	ND ND	ND	ND	NI Ni
Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	NI NI
Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
Benzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
Benzo (ghi) perylene	ND	ND	ND	ND	ND	ND	NI NI
Benzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	Ni Ni
Bis (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	Ní
Bis (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	NI NI
Bis (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	NI NI
Bis (2-ethylhexyl) phthalate	ND	11.8	ND	ND	ND	<10.0	NI NI
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	N
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
Chrysene	ND	NĐ	ND	ND	ND	ND	N
Dibenzo (a,h) anthracene	ND	NĐ	ND	ND	ND	ND	N
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	N
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	N
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	N
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	N
Diethyl phthalate	ND	ND	ND	ND	ND	ND	N.
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	N
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	N
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	N
1,2-Diphenylhydrazine	NĐ	ND	ND	ND	ND	ND	N
Fluoranthene	2.3	NĐ	ND	ND	4.3	2.48	<2.
Fluorene	ND	<1.9	ND	ND	ND	8.60	9.3
Hexach Lorobenzene	ND	ND	ND	ND	ND	ND	N
Hexach Lorobutadiene	ND	ND	ND	ND	ND	ND	N
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	N
Hexachloroethane	ND	ND	ND	ND	ND	ND	N
Indeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	N
Isophorone	ND	ND	ND	ND	ND	ND	N
Naphthalene	ND	<1.6	ND	ND	ND	ND	N
Ni trobenzene	ND	ND	ND	ND	ND	ND	N
n-Nitrosodimethylamine	ND	ND ND	ND	ND	ND	ND	N
n-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	N
n-Nitrosodiphenylamine	ND ND	ND ND	ND	ND ND	ND	ND <5.4	N
Phenanthrene Punana	ND 2.4	ND	ND ND	ND	ND ND	<1.9	×1.
Pyrene 1,2,4-Trichlorobenzene	ND	ND	ND ND	ND ND	ND ND	ND	×1.
Total Base/Neutral Compounds Analyzed	4.7	11.8	0	13	11.6	20.1	21.

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation: Date: USEPA Priority Pollutant Base/Neutral Extractable Organic Compounds (Concentrations are in ug/L) Accemaphtheme Accemapthylene Anthraceme Benzo (a) anthraceme Benzo (b) fluoroantheme Benzo (ghi) perylene Benzo (ghi) perylene Benzo (c-chloroethoxy) methane Bis (2-chloroisopropyl) ether Bis (2-chloroisopropyl) ether Bis (2-ethylhexyl) phthalate Benzo (b) fluoroantheme Bis (2-chloroisopropyl) ether Bis (2-chlorobenyl phenyl ether Butyl benzyl phthalate Bibenzo (a,h) anthraceme Bibenzo (a,h) anthraceme Bibenzo (a,h) anthraceme Bibenzo (a,h) anthraceme Bibenzo (a,b) anthraceme	MW13 1/85 ND	MW13 4/85 6.7 ND ND ND	MW13 7/85 2.79 ND ND	MW13 10/85 17.3 ND	MW14 1/85	MW14 4/85	MW14 7/85
Base/Neutral Extractable Organic Compounds (Concentrations are in ug/L) Accenaphthene Accenapthylene Anthracene Benzidine Benzo (a) anthracene Benzo (b) fluoroanthene Benzo (ghi) perylene Benzo (k) fluoranthene Bis (2-chloroethoxy) methane Bis (2-chloroethyl) ether Bis (2-chloroisopropyl) ether Bis (2-chlorophenyl phenyl ether Bis (2-chlorophenyl phenyl ether Bis (2-chlorobenzene Bis (2-chlorobenzene Bis (2-chlorobenzene	ND ND ND ND ND	ND ND ND	ND				,,
rganic Compounds Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethoxy) methane is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloroaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene	ND ND ND ND ND	ND ND ND	ND				
Concentrations are in ug/L) cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethoxy) methane is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloroaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene	ND ND ND ND ND	ND ND ND	ND		ND		
cenaphthene cenapthylene nthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene	ND ND ND ND ND	ND ND ND	ND		ND		
cenapthylene nthracene enzidine enzo (a) anthracene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene	ND ND ND ND ND	ND ND ND	ND		ND		
cenapthylene nthracene enzidine enzo (a) anthracene enzo (a) pyrene enzo (b) fluoroanthene enzo (ghi) perylene enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene	ND ND ND ND ND	ND ND ND	ND		ND		
Inthracene Idenzidine Idenzo (a) anthracene Idenzo (a) pyrene Idenzo (b) fluoroanthene Idenzo (ghi) perylene Idenzo (k) fluoranthene Idenzo (k) fluoranthene Idenzo (k) fluoranthene Idenzo (c) fluora	ND ND ND ND ND	ND ND		ND		ND	ND
denzidine denzo (a) anthracene denzo (a) pyrene denzo (b) fluoroanthene denzo (ghi) perylene denzo (k) fluoranthene dis (2-chloroethoxy) methane dis (2-chloroethyl) ether dis (2-chloroisopropyl) ether dis (2-ethylhexyl) phthalate denzo denzyl phenyl ether dutyl benzyl phthalate denzyl phthalate denzyl phthalate denzyl phthalate denzyl phenyl ether display denzyl phenyl ether display denzyl phenyl ether	ND ND ND	ND	NU	NU	ND	ND	ND
denzo (a) anthracene denzo (b) fluoroanthene denzo (c) fluoroanthene denzo (c) fluoranthene	ND ND ND		NU	3.59	ND	ND	ND
denzo (a) pyrene denzo (b) fluoroanthene denzo (ghi) perylene denzo (k) fluoranthene dis (2-chloroethoxy) methane dis (2-chloroisopropyl) ether dis (2-chloroisopropyl) ether dis (2-ethylhexyl) phthalate denzo denzyl phenyl ether dutyl benzyl phthalate denzyl phthalate denzyl phthalate denzyl phthalate denzyl phthalate denzyl phenyl ether displays phenyl ether displays phenyl ether denzyl phenyl ether	ND ND	ďИ	ND	ND	ND	ND	ND
denzo (b) fluoroanthene denzo (ghi) perylene denzo (k) fluoranthene dis (2-chloroethoxy) methane dis (2-chloroisopropyl) ether dis (2-chloroisopropyl) ether dis (2-ethylhexyl) phthalate denomphenyl phenyl ether dutyl benzyl phthalate denomphenyl phenyl ether distribution den distribution di	ND		ND	ND	ND	ND	<2.5
denzo (ghi) perylene denzo (k) fluoranthene dis (2-chloroethoxy) methane dis (2-chloroethyl) ether dis (2-chloroisopropyl) ether dis (2-ethylhexyl) phthalate denomphenyl phenyl ether dutyl benzyl phthalate denomphenyl phenyl ether display benzyl phthalate denomphenyl phenyl ether display benzyl phenyl ether denomphenyl ether denomphenyl phenyl ether denomphenyl ether denomphenyl ether		ND	ND	ND	ND	ND	<4.8
enzo (k) fluoranthene is (2-chloroethoxy) methane is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether thrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
dis (2-chloroethoxy) methane dis (2-chloroethyl) ether dis (2-chloroisopropyl) ether dis (2-ethylhexyl) phthalate dis (2-ethylhexyl) phthalate dis (2-ethylhexyl) phthalate dis (2-ethylhexyl) phthalate dis (2-ethylhexyl) phenyl ether dis (2-ethylhexyl) phenyl ether dis (2-ethorophenyl) phenyl ether dispense dibenzo (a,h) anthracene (2-Dichlorobenzene (3-Dichlorobenzene		ND	ND	ND	ND	ND	ND
is (2-chloroethyl) ether is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether ityl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether ihrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
is (2-chloroisopropyl) ether is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
is (2-ethylhexyl) phthalate -Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
-Bromophenyl phenyl ether utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
utyl benzyl phthalate -Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	<10.0	ND	ND	ND	12.2
-Chloronaphthalene -Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
-Chlorophenyl phenyl ether hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
hrysene ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
ibenzo (a,h) anthracene ,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
,2-Dichlorobenzene ,3-Dichlorobenzene	ND	ND	ND	ND	NĐ	ND	ND
,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
•	ND	ND	ND	ND	ND	ND	ND
,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
7 of all and amount disc.	ND	ND	ND	ND	ND	ND	ND
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND
iethyl phthalate	ND	ND	ND	ND	ND	ND	ND
imethyl phthalate	ND	ND	ND	ND	ND	ND	ND
i-n-butyl phthalate ,4-Dinitrotoluene	ND ND	ND	<10	<10	ND	ND	ND
,6-Dinitrotoluene	ND	ND ND	ND ND	ND	ND	ND	ND
i-n-octyl phthalate	ND	ND	ND ND	ND ND	ND	ND	ND
,2-Diphenylhydrazine	ND	ND	ND ND	ND	ND ND	ND ND	ND
luoranthene	16	5.2	ND	2.89	ND		ND -2.2
luorene	ND	ND	<1.9	17.2	ND	6.4 ND	<2.2 ND
exach Lorobenzene	ND	ND	ND	ND	ND	ND	
exachtorobutadiene	ND	ND	ND	ND	ND ND	ND	ND
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND ND
exachloroethane	ND	ND	ND	ND	ND	ND	ND ND
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	ND ND
sophorone	ND	ND	ND	ND	ND		
aphthalene	ND	1.9	ND ND	3.20	ND	ND ND	ND ND
itrobenzene	ND	ND	ND	ND	ND	ND	ND
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	ND ND
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	ND.
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND
henanthrene	11	30.4	<5.5	<5.5	ND	5.7	ND
yrene	ND	ND	ND	<1.9	ND	ND	ND
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND
	• • • • • • • • • • • • • • • • • • • •						PD

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW14	MW14	MW15	MW15	MW15	MW16	MW1
Date:	10/85	12/86	1/85	4/85	7/85	1/85	4/8
SEPA Priority Pollutant						•	
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	3.46	NA	ND	ND	ND	ND	
cenapthylene	ND	NA	ND	ND	ND	ND	1
nthracene	ND	NA	ND	ND	ND	ND	1
enzidine	ND	NA	ND	ND	ND	ND	1
enzo (a) anthracene	<8.3	NA	ND	ND	ND	ND	i
enzo (a) pyrene	ND	NA	ND	ND	ND	ND	1
enzo (b) fluoroanthene	ND	NA	ND	ND	ND	ND	
enzo (ghi) perylene	ND	NA	ND	ND	ND	ND	
enzo (k) fluoranthene	ND	NA	ND	ND	ND	ND	
is (2-chloroethoxy) methane	ND	NA	ND	ND	ND	ND	
is (2-chloroethyl) ether	ND	NA	ND	ND	ND	ND	
is (2-chloroisopropyl) ether	ND	NA	ND	ND	ND	ND	
is (2-ethylhexyl) phthalate	28.0	NA	ND	ND	ND	ND	
-Bromophenyl phenyl ether	ND	NA	ND	ND	ND	ND	
utyl benzyl phthalate	ND	NA	ND	ND	ND	ND	
-Chloronaphthalene	ND	NA	ND	ND	ND	ND	
-Chlorophenyl phenyl ether	ND	NA	ND	ND	ND	ND	
hrysene	ND	NA	ND	ND	ND	ND	
ibenzo (a,h) anthracene	ND	NA	ND	ND	ND	ND	
,2-Dichlorobenzene	ND	NA	11	ND	ND	ND	
,3-Dichlorobenzene	ND	NA	ND	ND	ND	ND	
,4-Dichlorobenzene	9.70	NA	ND	ND	ND	ND	
,3-Dichlorobenzidine	ND	NA	ND	ND	ND	ND	
iethyl phthalate	ND	NA	ND	ND	ND	ND	
imethyl phthalate	ND	NA	ND	ND	ND	ND	
i-n-butyl phthalate	ND	NA	ND	ND	<10.0	ND	
,4-Dinitrotoluene	ND	NA	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	NA	ND	ND	ND	ND	
i-n-octyl phthalate	ND	NA	ND	ND	ND	ND	
,2-Diphenylhydrazine	ND	NA	ND	ND	ND	ND	
luoranthene	2.78	NA	ND	ND	ND	ND	
luorene	3.51	NA	ND	ND	ND	ND	
exachloro benzene	ND	NA	ND	ND	ND	ND	
exachlorobutadiene	ND	NA	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	NA	ND	ND	ND	ND	
exachloroethane	ND	NA	ND	ND	ND	ND	
ndeno (1,2,3-c,d) pyrene	ND	NA	ND	ND	ND	ND	
sophorone	ND	NA	ND	ND	ND	ND	
aphthalene	6.45	NA	ND	ND	ND	ND	
i trobenzene	ND	NA	ND	ND	ND	ND	
-Nitrosodimethylamine	ND	NA.	ND	ND	ND	ND	
-Nitrosodi-n-propylamine	ND	NA.	ND	ND	ND	ND	
-Nitrosodiphenylamine	ND	NA.	89	ND	ND	ND	
nenanthrene	ND	NA.	ND	62.3	ND	ND	
yrene	ND	NA NA	ND	ND	ND	ND	
,2,4-Trichlorobenzene	ND	NA NA	ND	ND	ND	ND	
		500856VE 500				•••	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW16	MW16	MW17	MW17	MW17	MW17	MW18/
Date:	7/85	10/85	1/85	4/85	7/85	10/85	1/8
USEPA Priority Pollutant							
Base/Neutral Extractable							
Organic Compounds							
(Concentrations are in ug/L)							
Acenaphthene	ND	ND	ND	ND	2.02	ND	NC
Acenapthylene	ND	ND	ND	ND	ND	ND	N
Anthracene	<1.9	ND	ND	ND	2.81	ND	NC
Benzidine	ND	ND	ND	ND	ND	ND	N
Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	NE
Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	NE
Benzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	NE
Benzo (ghi) peryl ene	ND	ND	ND	ND	ND	ND	N
Benzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	NE
Bis (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	NO
Bis (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	NC
Bis (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	NE
Bis (2-ethylhexyl) phthalate	<10	ND	ND	ND	<10	<10	22.7
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	NE
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	N
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
Chrysene	ND	ND	ND	ND	ND	ND	N
Dibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	N
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	1.9
1,3-Dichlorobenzene	ND	NĎ	ND	ND	ND	ND	N
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	NO
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	NE
Diethyl phthalate	ND	ND	ND	ND	ND	ND	NE
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	NC
Di-n-butyl phthalate	ND	<10	ND	ND	ND	<10	NE
2,4-Dinitrotoluene	6.71	ND	ND	ND	ND	ND	NC
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	N
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	NI
Fluoranthene	ND	ND	ND	ND	4.30	ND	N
Fluorene	ND	ND	ND	ND	2.35	ND	NI
Hexach Lorobenzene	ND	ND	ND .	ND	ND	ND	N
Hexach Lorobutadiene	ND	ND	ND	ND	ND	ND	NI
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	NI
Hexachloroethane	ND	ND	ND	ND	ND	ND	N
Indeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	N
Isophorone	ND	ND	ND	ND	ND	ND	NI
laphthalene	<1.6	ND	ND	NĐ	ND	ND	15.
litrobenzene	ND	ND	ND	ND	ND	ND	N.
n-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	NI NI
n-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	NE
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	NI NI
Phenanthrene	ND	ND	ND	ND	11.8	ND	NI NI
Pyrene	ND	ND	ND	ND	2.88	ND	Ni Ni
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	NE
Total Base/Neutral Compounds Analyzed	6.7						

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW18A	MW18A	MW18A	MW18A	MW188	MW18B	MW18
Date:	4/85	7/85	10/85	12/86	1/85	4/85	7/85
SEPA Priority Pollutant							
ase/Neutral Extractable							
rganic Compounds							
Concentrations are in ug/L)							
cenaphthene	ND	ND	ND	ND	ND	ND	NI
cenapthylene	ND	ND	ND	ND	ND	ND	NI
nthracene	ND	ND	ND	ND	ND	ND	N
enzidine	ND	ND	ND	ND	ND	ND	N
enzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
enzo (a) pyrene	ND	ND	ND	ND	ND	ND	N:
enzo (b) fluoroanthene	ND	ND	ND	ND	ND ND	ND	N
enzo (ghi) perylene	ND	ND	ND	ND		ND	N
enzo (k) fluorantheme	ND	ND	ND	ND	ND	ND	N
is (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
is (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	N
is (2-chloroisopropyl) ether	ND 15 5	ND	ND	ND 1/ 1	ND	ND	N
is (2-ethylhexyl) phthalate	15.5	<10.5	44.1	14.1	ND	ND	<11.
-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
utyl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
-Chloronaphthalene	ND	ND	ND	ND	ND	ND	
-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	!
hrysene	ND	ND	ND	ND	ND	ND	!
ibenzo (a,h) anthracene	ND	ND	ND 70.7	3.30	ND	ND	
,2-Dichlorobenzene	2.1	11.2	30.7	ND 7 70	ND	ND	!
,3-Dichlorobenzene	ND	ND	6.59	7.32	ND	ND	. !
,4-Dichlorobenzene	ND	46.5	67.8	ND	ND	ND	
,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	!
iethyl phthalate	ND	ND	ND	ND	ND	ND	
imethyl phthalate	ND	ND	ND	ND	ND	ND	
i-n-butyl phthalate	ND	ND	ND	<10	3.8	ND	<11.
,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	1
i-n-octyl phthalate	ND	ND	<10	ND	ND	ND	, ,
,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
luoranthene	ND	ND	ND	ND	ND	ND	1
luorene	ND	ND	ND	ND	ND	ND	1
exach Lorobenzene	ND	ND	ND	ND	ND	ND	!
exachlorobutadiene	ND	ND	ND	ND	ND	ND	
exachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	[
exachloroethane	ND	ND	ND	ND	ND	ND	[
ndeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	1
sophorone	ND	ND	ND	ND	ND	ND	1
aphtha lene	15.7	191	229	ND	ND	ND	1
itrobenzene	ND	ND	ND	ND	ND	ND	1
-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	1
henanthrene	ND	ND	ND	ND	ND	ND	!
yrene	ND	ND	ND	ND	ND	ND	
,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ļ

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW18B	MW18B	MW19	MW19	MW19	MW19	MW19
Date:	10/85	12/86	1/85	4/85	7/85	10/85	12/8
USEPA Priority Pollutant							
Base/Neutral Extractable							
Organic Compounds							
(Concentrations are in ug/L)							
						• • • • • • • • • • • • • • • • • • • •	
Acenaphthene	ND	ND	ND	ND	ND	ND	N
Acenapthylene	ND	ND	ND	ND	ND	ND	N
Anthracene	ND	ND	ND	ND	ND	ND	N
Benzidine	ND	ND	ND	ND	ND	ND	N
Benzo (a) anthracene	ND	ND	ND	ND	ND	ND	N
Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
Benzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
Benzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
Benzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	N
Bis (2-ethylhexyl) phthalate	ND	17.6	ND	ND	<10.0	ND	N
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	N
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	N
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	N
Chrysene	ND	ND	ND	ND	ND	ND	N
Dibenzo (a,h) anthracene 1,2-Dichlorobenzene	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	N
1,3-Dichlorobenzene	ND	ND	ND	ND ND	ND	ND	N
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND ND	N N
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	N N
Diethyl phthalate	ND	ND	ND	ND	ND	ND	N
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	N
Di-n-butyl phthalate	ND	<11	ND	ND	ND	ND	N
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	N N
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND	N N
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	N
Fluoranthene	ND	ND	ND	ND	ND	ND	N N
Fluorene	ND	ND	ND	ND	ND	ND	N.
Hexach Lorobenzene	ND	ND	ND	ND	ND	ND	N
Hexach Lorobutadiene	ND	ND	ND	ND	ND	ND	N
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	N
Hexachloroethane	ND	ND	ND	ND	ND	ND	N
Indeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	N
Isophorone	ND	ND	ND	ND	<2.2	2.96	N
Naphthalene	ND	ND	ND	2.4	ND	ND	N.
Nitrobenzen e	ND	ND	ND	ND	ND	ND	N
n-Nitrosodimethylamine	NĐ	ND	ND	ND	ND	ND	
n-Nitrosodi-n-propylamine	ND	ND	ND	NĐ	ND	ND	, i
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	,
Phenanthrene	ND	ND	ND	ND	ND	ND	
Pyrene	ND	ND	ND	NĐ	ND	ND	1
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND)

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	MW20	MW20	MW20	MW20	MW20	BLANK	BLA
Date:	1/85	4/85	7/85	10/85	12/86	10/84	10/
EPA Priority Pollutant							
se/Neutral Extractable							
ganic Compounds							
oncentrations are in ug/L)							
enaph thene	ND	ND	9.59	8.61	8.47	ND	
enapthylene	ND	ND	ND	ND	ND	ND	
thracene	ND	ND	2.48	ND	<2.0	ND	
nzidine	ND	ND	ND	ND	ND	ND	
nzo (a) anthracene	ND	ND	<7.9	ND	ND	ND	
nzo (a) pyrene	ND	ND	<2.5	ND	ND	ND	
nzo (b) fluoroanthene	NĐ	ND	ND	ND	ND	ND	
nzo (ghi) perylene	ND	ND	ND	ND	ND	ND	
nzo (k) fluoranthene	ND	ND	<3.5	ND	ND	ND	
s (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	
s (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	
s (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	
s (2-ethylhexyl) phthalate	ND	ND	<10.1	ND	13.0	ND	
Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	
tyl benzyl phthalate	ND	ND	ND	ND	ND	ND	
Chloronaphthalene	ND	ND	ND	ND	ND	ND	
Chlorophenyl phenyl ether	NĐ	ND	ND	ND	ND	ND	
rysene	ND	ND	ND	ND	ND	ND	
benzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	
2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	
3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	
ethyl phthalate	ND	ND	NĐ	ND	ND	ND	
methyl phthalate	ND	ND	ND	ND	ND	NĎ	
-n-butyl phthalate	ND	ND	<10.1	ND	ND	1	
4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	
-n-octyl phthalate	ND	ND	ND	ND	ND	ND	
2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	
uoranthene	ND	2.5	15.1	2.50	5.34	ND	
uorene	ND	4.0	9.75	6.93	7.87	ND	
xachlorobenzene	ND	ND	ND	ND	ND	ND	
xachlorobutadiene	ND	ND	ND	ND	ND	ND	
xachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	
exachloroethane	ND	ND	ND	ND	ND	ND	
deno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	
ophorone	ND	ND	ND	ND	ND	ND	
phthalene	ND	ND	ND	ND	ND	ND	
trobenzene	ND	ND	ND	ND	ND	ND	
Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	
Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	
Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	
enanthrene	ND	ND	<5.5	ND	ND	ND	
rene	ND	ND	13.1	<1.9	ND	ND	
2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

	LAB	LAB	LAB	METHOD	JAR	JAR	
Well Designation:	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	XFB
Date:	10/84	10/84	10/84	1/85	1/85	1/85	10/8
SEPA Priority Pollutant							
Base/Neutral Extractable							
Organic Compounds							
(Concentrations are in ug/L)							
						•	• • • • • • •
Acenaph thene	ND	ND	ND	ND	ND	ND	N
Acenapthylene	ND	ND	ND	ND	ND	ND	N
Anthracene	ND	ND	ND	ND	ND	ND	N
Benzidine	ND	ND	ND	ND	ND	ND	
Benzo (a) anthracene	ND	ND	ND	ND	ND	NĐ	,
Benzo (a) pyrene	ND	ND	ND	ND	ND	ND	N
Benzo (b) fluoroanthene	ND	ND	ND	ND	ND	ND	N
Benzo (ghi) perylene	ND	ND	ND	ND	ND	ND	N
Benzo (k) fluoranthene	ND	ND	ND	ND	ND	ND	N
Bis (2-chloroethoxy) methane	ND	ND	ND	ND	ND	ND	
Bis (2-chloroethyl) ether	ND	ND	ND	ND	ND	ND	1
Bis (2-chloroisopropyl) ether	ND	ND	ND	ND	ND	ND	•
Bis (2-ethylhexyl) phthalate	<1	<1	ND	ND	ND	ND	ı
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND	ND	ı
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	١
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	1
4-Chlorophenyl phenyl ether	ND	ND	ND	ND	ND	ND	ı
Chrysene	ND	ND	ND	ND	ND	ND	ı
Dibenzo (a,h) anthracene	ND	ND	ND	ND	ND	ND	1
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	1
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	1
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ŀ
3,3-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ı
Diethyl phthalate	ND	ND	ND	ND	ND	ND	N
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	
Di-n-butyl phthalate	ND	ND	ND	2.7	ND	ND	<'
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ì
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	,
Di-n-octyl phthalate	ND	ND	ND	ND	ND	ND)
1,2-Diphenylhydrazine	ND	ND	ND	ND	ND	ND	•
Fluoranthene	ND	ND	ND	ND	ND	ND	
Fluorene	ND	ND	ND	ND	ND	ND	,
Hexach torobenzene	ND	ND	ND	ND	NĐ	ND	ı
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ŀ
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ı
Hexachloroethane	ND	ND	ND	ND	ND	ND	,
Indeno (1,2,3-c,d) pyrene	ND	ND	ND	ND	ND	ND	1
I sophorone	ND	ND	ND	ND	ND	ND	1
Naphthalene	ND	ND	ND	ND	ND	ND	
Nitrobenzene	ND	ND	ND	ND	ND	ND	1
n-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND	1
n-Nitrosodi-n-propylamine	ND	ND	ND	ND	ND	ND	•
n-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	1
Phenanthrene	ND	ND	NĐ	ND	ND	ND	ì
Pyrene	ND	ND	ND	ND	ND	ND	,
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND)
Total Base/Neutral Compounds Analyzed	0	0		2.7		• • • • • • • • • • • • • • • • • • • •	

^{* -} Replicate Sample.

ND - Not Detected.

Table 5. Summary of Base/Neutral Extractable Compounds in Ground Water, Monsanto Company, J.F. Queeny Plant, St. Louis, Missouri.

Well Designation:	XFB1	XFB2	XFB2
Date:	12/86	10/85	12/86
JSEPA Priority Pollutant			
Base/Neutral Extractable			
Organic Compounds			
(Concentrations are in ug/L)			
Acenaph thene	ND	ND	NC
Acenapthylene	ND	ND	NC
Anthracene	ND	ND	NE
Benzidine Benzidine	ND	ND	NE
Benzo (a) anthracene	ND	ND	NC
Benzo (a) pyrene	ND	ND	NC
Benzo (b) fluoroanthene	ND	ND	NE
Benzo (ghi) perylen e	ND	ND	NC
Benzo (k) fluoranthene	ND	ND	NC
Bis (2-chloroethoxy) methane	ND	ND	NC
Bis (2-chloroethyl) ether	ND	ND	NE
Bis (2-chloroisopropyl) ether	ND	ND	NC
Bis (2-ethylhexyl) phthalate	ND	ND	NC
4-Bromophenyl phenyl ether	ND	ND	NC
Butyl benzyl phthalate	ND	ND	NC
2-Chloronaphthalene	ND	ND	NC
4-Chlorophenyl phenyl ether	ND	ND	NC
Chrysene	ND	ND	NO
Dibenzo (a,h) anthracene	ND	ND	NE
1,2-Dichlorobenzene	ND	ND	NC
1,3-Dichlorobenzene	ND	ND	NC
1,4-Dichlorobenzene	ND	ND	NC
3,3-Dichlorobenzidine	ND	ND	NC
Diethyl phthalate	ND	ND	NE
Dimethyl phthalate	ND	ND	NE
Di-n-butyl phthalate	ND	ND	<10
2,4-Dinitrotoluene	ND	ND	NC
2,6-Dinitrotoluene	ND	ND	NE
Di-n-octyl phthalate	ND	NĎ	NE
1,2-Diphenylhydrazine	ND	ND	NE
Fluoranthene	ND	ND	NE
Fluorene	ND	NĐ	N
iexach l orobenzene	ND	ND	N
Hexachlorobutadiene	ND	ND	NE
Hexachlorocyclopentadiene	ND	ND	NE
lexach Loroethane	ND	ND	NE
Indeno (1,2,3-c,d) pyrene	ND	ND	N
I sophorone	ND	ND	NE
laph tha lene	NO	ND	NC
litrobenzene	ND	ND	NC
n-Nitrosodimethylamine	ND	ND	NE
n-Nitrosodi-n-propylamine	ND	ND	NC
n-Nitrosodiphenylamine	ND	ND	NC
Phenanthrene	ND	ND	NC
Pyrene	ND	ND	N
1,2,4-Trichlorobenzene	ND	ND	NC
Total Base/Neutral Compounds Analyzed	0	0	1

^{* -} Replicate Sample.

ND - Not Detected.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1B
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	4/84
USEPA Priority Pollutant Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	. ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW1B	MW1B	MW1B	MW1B	MW1B	MW1B	MW2A	MW2A
Date:	8/84	10/84	1/85	4/85	7/85	10/85	4/84	8/84
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma - BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248 °	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW2A MW2A MW2A MW2A MW2A MW2B MW2B MW2B 10/84 1/85 4/85 7/85 10/85 4/84 Date: 8/84 10/84 **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) ND Aldrin ND ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND ND ND ND ND ND ND Gamma-BHC ND ND ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4.4'-DDT ND ND ND ND ND ND ND NO 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan I ND ND ND ND ND ND ND ND Endosulfan II ND ND ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND ND Endrin ND ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND ND ND ND ND ND ND ND Heptachlor epoxide ND ND ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PCB-1232 ND ND ND ND ND ND ND ND PCB-1242 ND ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND 0 Total Pesticides/PCB Compounds 0 0 0 0 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

	Well Designation: Date:	MW2B 1/85	MW2B 4/85	MW2B 7/85	MW2B 10/85	MW3 4/84	MW3 8/84	MW3 10/84	MW 1/8
	ity Pollutant								
•	CB Compounds								
Concentrat	ions are in ug/L)							• • • • • • • • • • • • • • • • • • • •	-
Aldrin	~	ND	ND	ND	ND	ND	ND	ND	N
lpha-BHC	2,4/5 K	ND	ND	ND	ND	ND	ND	ND	N
Beta-BHC	- January Care	ND	ND	ND	ND	ND	ND	ND	N
iamma-BHC	44,2	ND	ND	ND	ND	ND	ND	ND	N
elta-BHC		ND	ND	ND	ND	ND	ND	ND	N
hlordane		ND	ND	ND	ND	ND	ND	ND	N
,4'-DDT		ND	ND	ND	ND	ND	ND	ND	N
,4'-DDE		ND	ND	ND	ND	ND	ND	ND	N
,4'-DDD		ND	ND	ND	ND	ND	ND	ND	N
ieldrin		ND	ND	ND	ND	ND	ND	ND	N
ndosulfan	1	ND	ND	ND	ND	ND	ND	ND	M
indosul fan	11	ND	ND	ND	ND	ND	ND	ND	N.
indosul fan	sulfate	ND	ND	ND	ND	ND	ND	ND	N.
ndrin		ND	ND	ND	ND	ND	ND	ND	1
indrin alde	ehyde	ND	ND	ND	ND	ND	ND	ND	•
leptachlor		ND	ND	ND	ND	ND	ND	ND	N
eptachlor	epoxide	ND	ND	ND	ND	ND	ND	ND	N
CB-1016		ND	ND	ND	ND	ND	ND	ND	
CB-1221		ND	ND	ND	ND	ND	ND	ND	N
CB-1232		ND	ND	ND	ND	ND	ND	ND	1
CB-1242		ND	ND	ND	ND	ND	ND	ND	1
CB-1248		ND	ND	ND	ND	ND	ND	ND	ı
CB-1254		ND	ND	ND	ND	ND	ND	ND)
CB-1260		ND	ND	ND	ND	ND	ND	ND	1
oxaphene		ND	ND	ND	ND	ND	ND	ND	ı

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW3	MW3	MW4	MW4	MW4	MW4	MW4	MW4
Date:	4/85	7/85	4/84	8/84	10/84	1/85	4/85	7/85
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
 Total Pesticides/PCB Compounds	0	0	0		0	0	0	

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW4	MW5	MW5	MW5	MW5	MW5	MW5	MW5
Date:	10/85	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	NÐ	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	NĐ	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlord ane	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	NĐ	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	NĐ	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	NĐ	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0						

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

MW6A MW6A MW6A MW6A MW6A MW6A MW6B Well Designation: MW6A 8/84 10/84 1/85 4/85 7/85 Date: 4/84 10/85 1/85 **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND Alpha-BHC ND Beta-BHC ND Gamma-BHC ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4,4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan i ND ND ND ND ND ND ND ND Endosulfan II ND ND ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND ND Endrin ND ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND Heptachlor epoxide ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PCB-1232 ND ND ND ND ND ND ND ND PCB-1242 MD ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND 0 0 0 0 Total Pesticides/PCB Compounds 0 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

MW68 MW6B MW6B MW7A MW7A MW7A MW7A MW7A Well Designation: 4/85 7/85 10/85 4/84 8/84 10/84 1/85 4/85 Date: **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND ND ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND ND ND ND ND ND ND Gamma - BHC ND ND ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4,4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan I ND ND ND ND ND ND ND ND Endosulfan II ND NO ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND Endrin ND Endrin aldehyde ND ND ND ND ND ND ND Heptachlor ND ND ND ND ND Heptachlor epoxide ND MD ND ND PCB-1016 ND ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PCB-1232 ND ND ND ND ND ND ND ND PCB-1242 ND ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND Total Pesticides/PCB Compounds 0 0 0 0 0 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW7A	MW7A	MW7B	MW7B	MW7B	MW7B	MW7B	MW7B
Date:	7/85	10/85	4/84	8/84	10/84	1/85	4/85	7/85
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma - BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	NĐ	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	NÐ	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	. ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW7B	ASWM	ASUM	ASHM	MW8A	A8WM	MW8A	A8WM
Date:	10/ 85	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma - BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	NĐ	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	NĐ	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW8B MW8B MW8B MW8B MW8B MW88 MW8B MW9 4/84 8/84 10/84 1/85 4/85 7/85 Date: 10/85 4/84 **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND ND ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND MD ND ND ND ND ND Gamma - BHC ND ND MD MD ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4,4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan I ND ND ND ND ND ND MD ND Endosulfan II ND NĐ ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND ND Endrin ND ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND NĐ ND ND ND ND ND ND Heptachlor epoxide ND ND ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PCB-1232 ND ND ND ND ND ND ND ND PCB-1242 ND ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND Total Pesticides/PCB Compounds 0 0 0 0 0 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

MW9 MW9 MW9 MW9 Well Designation: MW9 MW9 MW10 MW10 8/84 10/84 1/85 4/85 7/85 Date: 10/85 4/84 8/84 **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND ND ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND ND ND ND ND ND ND Gamma-BHC ND ND ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4,4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND NĐ ND ND ND Endosulfan I ND ND ND ND ND ND ND ND Endosulfan II ND ND ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND ND Endrin ND ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND ND ND ND ND ND ND ND Heptachlor epoxide ND ND ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND MD NĐ PCB-1221 MD MD ND ND ND ND ND ND PCB-1232 ND ND ND ND ND ND ND ND PCB-1242 ND ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND

0

0

0

0

0

0

Total Pesticides/PCB Compounds

0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW10	MW10	MW10	MW10	MW10	MW11A	MW11A	MW11A
Date:	10/84	1/85	4/85	7/85	10/85	4/84	8/84	10/84
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma - BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	NĐ	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	NĐ	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW11A	MW11A	MW11A	MW11A	MW11B	MW11B	MW11B	MW11B
Date:	1/85	4/85	7/85	10/85	4/84	8/84	10/84	1/85
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND							
Alpha-BHC	ND							
Beta-BHC	ND							
Gamma - BHC	ND							
Delta-BHC	ND							
Chlordane	ND							
4,4'-DDT	ND							
4,4'-DDE	ND							
4,4'-DDD	ND							
Dieldrin	ND							
Endosulfan I	ND							
Endosulfan II	ND							
Endosulfan sulfate	ND							
Endrin	ND							
Endrin aldehyde	ND							
Heptachlor	ND							
Heptachlor epoxide	ND							
PC8-1016	ND	ND	ND	NĐ	ND	ND	ND	ND
PCB-1221	ND							
PCB-1232	ND							
PC8-1242	ND							
PCB-1248	ND							
PCB-1254	ND							
PCB-1260	ND							
Toxaphene	ND							
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW11B MW11B MW11B MW11C MW11C MW11C MW11C MW12 7/85 7/85 Date: 4/85 10/85 1/85 4/85 10/85 1/85 **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND ND ND ND ND ND ND Gamma-BHC ND ND ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4.4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan I ND ND ND ND ND ND ND ND Endosulfan II ND ND ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND ND Endrin ND ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND MD ND ND ND ND ND ND Heptachlor epoxide ND ND ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PCB-1232 ND ND ND ND ND ND ND ND PCB-1242 NĐ ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND Total Pesticides/PCB Compounds 0 0 0 0 0 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW12	MW12	MW12	MW13	MW13	MW13	MW13	MW14
Date:	4/85	7/85	10/85	1/85	4/85	7/85	10/85	1/85
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	NĐ	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	NĐ	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	NĐ	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0
	=======================================						==========	

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: Date:	MW14 4/85	MW14 7/85	MW14 10/85	MW15 1/85	MW15 4/85	MW15 7/85	MW15 10/85	M₩1 1/8
JSEPA Priority Pollutant	4/03	1703	10/03	1/05	4/05	1705	10/03	170
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	N
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	N
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	N
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	N
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	N
Chlordane	ND	ND	ND	ND	ND	ND	ND	N
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	N
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	N
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	N
Dieldrin	ND	ND	ND	ND	ND	ND	ND	N
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	N
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	N
indosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	N
Endrin	ND	ND	ND	ND	ND	ND	ND	N
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	N
Heptachlor	ND	ND	ND	ND	ND	ND	ND	N
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	N
PCB-1016	ND	ND	ND	ND	ND	ND	NĐ	N
PCB-1221	ND	ND	ND	ND	ND	ND	ND	N
PCB-1232	ND	ND	ND	ND	ND	ND	ND	N
PCB-1242	ND	ND	ND	ND	ND	NĐ	ND	N
PCB-1248	ND	ND	ND	ND	ND	ND	ND	N
PCB-1254	ND	ND	ND	ND	ND	ND	ND	N
PC8-1260	ND	ND	ND	ND	ND	ND	ND	N
Toxaphene	ND	ND	ND	ND	ND	ND	ND	N

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

MW16 MW16 MW16 MW17 MW17 MW17 Well Designation: MW17 MW18A 1/85 4/85 7/85 10/85 7/85 4/85 Date: 10/85 1/85 **USEPA** Priority Pollutant Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND ND ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND ND ND ND ND ND ND Gamma-BHC ND ND ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4,4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND ND ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan I ND ND ND ND ND ND ND ND Endosulfan II ND ND ND ND ND ND ND ND Endosulfan sulfate ND NĐ ND ND ND ND ND ND Endrin MD ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND ND ND ND ND ND ND ND Heptachlor epoxide ND ND ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PC8-1232 ND ND ND ND ND ND ND ND PC8-1242 ND NĐ ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND Total Pesticides/PCB Compounds 0 0 0 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation: MW18A MW18A MW18A MW18B MW18B MW18B MW18B MW19 4/85 7/85 10/85 1/85 4/85 7/85 10/85 1/85 Date: **USEPA Priority Pollutant** Pesticide/PCB Compounds (Concentrations are in ug/L) Aldrin ND ND ND ND ND ND ND ND Alpha-BHC ND ND ND ND ND ND ND ND Beta-BHC ND ND ND ND ND ND ND ND Gamma-BHC ND ND ND ND ND ND ND Delta-BHC ND ND ND ND ND ND ND ND Chlordane ND ND ND ND ND ND ND ND 4,4'-DDT ND ND ND ND ND ND ND ND 4,4'-DDE ND ND ND ND ND ND ND ND 4,4'-DDD ND ND ND NĐ ND ND ND ND Dieldrin ND ND ND ND ND ND ND ND Endosulfan I ND ND ND ND ND ND ND ND Endosulfan II ND ND ND ND ND ND ND ND Endosulfan sulfate ND ND ND ND ND ND ND ND Endrin ND ND ND ND ND ND ND ND Endrin aldehyde ND ND ND ND ND ND ND ND Heptachlor ND ND ND ND ND ND ND ND Heptachlor epoxide ND ND ND ND ND ND ND ND PCB-1016 ND ND ND ND ND ND ND ND PCB-1221 ND ND ND ND ND ND ND ND PC8-1232 ND ND ND ND ND ND ND ND PCB-1242 ND ND ND ND ND ND ND ND PCB-1248 ND ND ND ND ND ND ND ND PCB-1254 ND ND ND ND ND ND ND ND PCB-1260 ND ND ND ND ND ND ND ND Toxaphene ND ND ND ND ND ND ND ND 0 0 0 0 0 Total Pesticides/PCB Compounds 0 0 0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	MW19	MW19	MW19	MW20	MW20	MW20	MW20	BLANK
Date:	4/85	7/85	10/85	1/85	4/85	7/85	10/85	10/84
USEPA Priority Pollutant								
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ND .	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

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		LAB	LAB	LAB	METHOD	JAR	JAR	FIELD
Well Designation:	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
Date:	10/84	10/84	10/84	10/84	1/85	1/85	4/85	7/85
USEPA Priority Pollutant	•		•		-		•	
Pesticide/PCB Compounds								
(Concentrations are in ug/L)								
		• • • • • • • • • • • • • • • • • • • •						• • • • • • • • • • • • • • • • • • • •
Aldrin	ND	ND	ND	ND	ND	ND	ND	NA
Alpha-BHC	NĐ	ND	ND	ND	ND	ND	ND	NA
Beta-BHC	ND	ND	ND	ND	ND	ND	ND	NA
Gamma-BHC	ND	ND	ND	ND	ND	ND	ND	NA
Delta-BHC	ND	ND	ND	ND	ND	ND	ND	NA
Chlordane	ND	ND	ND	ND	ND	ND	ND	NA
4,4'-DDT	ND	ND	ND	ND	ND	ND	ND	NA
4,4'-DDE	ND	ND	ND	ND	ND	ND	ND	NA
4,4'-DDD	ND	ND	ND	ND	ND	ND	ND	NA
Dieldrin	ND	ND	ND	ND	ND	ND	ND	NA
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	NA
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	NA
Endosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	NA
Endrin	ND	ND	ND	ND	ND	ND	ND	NA
Endrin aldehyde	ND	NĐ	NĐ	ND	ND	ND	ND	NA
Heptachlor	ND	ND	ND	ND	ND	ND	ND	NA
Heptachlor epoxide	ND	ND	ND	ND	ND	ND	ND	NA
PCB-1016	ND	ND	ND	NĐ	ND	ND	ND	NA
PCB-1221	ND	ND	ND	ND	ND	ND	ND	NA
PCB-1232	ND	ND	ND	ND	ND	ND	ND	NA
PCB-1242	ND	ND	ND	ND	ND	ND	ND	NA
PCB-1248	ND	ND	ND	ND	ND	ND	ND	NA
PCB-1254	ND	ND	ND	ND	ND	ND	ND	NA
PCB-1260	ND	ND	ND	ND	ND	ND	ND	NA
Toxaphene	ND	ND	ND	ND	ND	ND	ND	NA
Total Pesticides/PCB Compounds	0	0	0	0	0	0	0	0
*************************		=======================================		· ·	- :==========	-	-	========

ND Not Detected.

^{* -} Replicate Sample.

Table 6. Summary of Pesticide/PCB Compounds in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Designation:	XFB1	XFB2
Date:	10/85	10/85
USEPA Priority Pollutant		
Pesticide/PCB Compounds		
(Concentrations are in ug/L)		
Aldrin	ND	ND
Alpha-BHC	ND	ND
Beta-BHC	ND	ND
Gamma-BHC	ND	ND
Delta-BHC	ND	ND
Chlordane	ND	ND
4,4'-DDT	ND	ND
4,4'-DDE	ND	ND
4,4'-DDD	ND	ND
Dieldrin	ND	ND
Endosulfan I	ND	ND
Endosulfan II	ND	ND
Endosulfan sulfate	ND	ND
Endrin	ND	ND
Endrin aldehyde	ND	ND
Heptachlor	ND	ND
Heptachlor epoxide	ND	ND
PCB-1016	ND	ND
PCB-1221	ND	ND
PCB-1232	ND	ND
PCB-1242	ND	ND
PCB-1248 -	ND	ND
PC8-1254	ND	ND
PCB-1260	ND	ND
Toxaphene	ND	ND
Total Pesticides/PCB Compounds	0	
	•	•

ND Not Detected.

^{* -} Replicate Sample.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1A	MW1B
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	4/84
USEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
					• • • • • • • • • • • • • • • • • • • •			
Antimony	19	130	10,400	ND	ND	ND	ND	24
Arsenic	48	24	6	ND	ND	ND	ND	69
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	2	5	1	8	ND	ND	ND	2
Chromium	80	41	20,600	ND	ND	ND	ND	70
Copper	90	54	36	ND	ND	ND	ND	100
Lead	22	62	10	ND	ND	ND	ND	81
Mercury	ND	0.34	0.65	ND	ND	ND	ND	0.27
Nickel	70	63	112	ND	ND	ND	ND	190
Selenium	ND	ND	ND	ND	ND	ND	ND	17
Silver	2	ND	1,600	ND	ND	ND	ND	3
Thailium	5	5	ND	ND	ND	ND	<5	6
Zinc	200	248	102	90	ND	ND	40	370
Miscellaneous Parameters								
Cyanide	21	14	9	59	ND	<25	44.3	28
Total Phenols (mg/L)	0.003	ND	ND	ND	ND	<50	<50	0.009
Total Organic Carbon (mg/L)	12	19.8	14.8	17/18	9.9/7.9	NA	ND	19

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

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Well Number:	MW1B	MW1B	MW18	MW1B	MW1B	MWZA	MWZA	MW2A	
Date:	10/84	1/85	4/85	7/85	10/85	4/84	8/84	10/84	
USEPA Priority Pollutant									
Metals (Concentrations are									
in ug/L, except where noted)									
Antimony	25,500	ND	ND	ND	ND	24	32	7,900	
Arsenic	24	ND	ND	ND	ND	69	2	8	
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	
Cadmium	3	ND	ND	ND	<4	2	ND	2	
Chromium	51,600	3	3	ND	ND	120	9	13,800	
Copper	125	ND	ND	ND	ND	ND	10	50	
Lead	28	ND	ND	ND	ND	46	16	13	
Mercury	0.22	ND	ND	ND	ND	0.22	ND	0.21	
Nickel	344	ND	ND	ND	<20	200	16	132	
Selenium	6	6	10	9	6	ND	ND	1_	
Silver	940	ND	ND	ND	ND	3	ND	2,570	
Thallium	ND	ND	ND	<5	ND	6	ND	ND	
Zinc	376	170	60	ND	30	390	20	113	
Miscellaneous Parameters									
		•••••							
Cyanide	ND	43	ND	<25	<25	12	15	7	
Total Phenols (mg/L)	ND	ND	ND	<50	<50	0.004	0.007	ND	
Total Organic Carbon (mg/L)	8.7	25/23	3.0/3.1	ND	ND	5	3	10.6	3

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Date: USEPA Priority Pollutant	4/85		MW2A	MW2A	MW2B	MW2B	MW2B	MW2B
•	4/63	7/85	10/85	12/86	4/84	8/84	10/84	1/85
Metals (Concentrations are								
n ug/L, except where noted)								
Intimony	ND	ND	ND	NA	20	48	15,600	ND
krsenic	ND	ND	NĐ	NA	57	17	20	7
Beryllium	ND	ND	ND	NA	ND	ND	ND	ND
Cadmium	ND	ND	<4	NA	3	8	2	ND
Chromium	ND	ND	ND	NA	ND	34	36,300	ND
Copper	ND	ND	ND	NA	60	58	71	ND
.ead	ND	ND	<50	NA	116	93	34	ND
lercury	ND	ND	ND	NA	0.24	0.42	0.26	ND
lickel	30	ND	30	NA	110	85	325	30
Selenium	ND	<5	ND	NA	ND	ND	ND	ND
Silver	ND	ND	ND	NA	2	ND	1,020	ND
'hallium	ND	ND	ND	NA	5	4	ND	ND
linc	ND	ND	70	NA	270	251	335	90
discellaneous Parameters								
		······						
Cyanide	ND	<25	<25	ND	22	ND	ND	ND
<pre>fotal Phenols (mg/L) fotal Organic Carbon (mg/L)</pre>	ND 12/12	100 ND	<50 ND	ND 5.09/5.37	0.004 15	ND 2.9	ND 9.2	ND 4.2/4.5

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW2B	MW2B	MW2B	MW3	MW3	MW3	MW3	MW3
Date:	7/85	10/85	12/86	4/84	8/84	10/84	1/85	4/85
USEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	ND	ND	NA	14	52	14,600	ND	ND
Arsenic	ND	ND	NA.	24	11	22	5	10
Beryllium	ND	ND	NA	ND	ND	ND	ND	ND
Cadmium	<8	<4	NA	2	3	4	NĐ	ND
Chromium	ND	ND	NA	ND	20	27,300	ND	ND
Copper	ND	ND	NA	ND	46	152	ND	ND
Lead	ND	<50	NA	14	61	64	ND	ND
Mercury	ND	ND	NA	0.22	0.56	0.48	ND	ND
Nickel	<50	30	NA	ND	43	313	ND	9
Selenium	ND	ND	NA	ND	ND	ND	ND	□ ND
Silver	ND	ND	NA	3	ND	2,150	ND	ND
Thallium	ND	ND	NA	6	3	ND	ND	ND
Zinc	ND	70	NA	60	162	432	ND	10
Miscellaneous Parameters								
Propide		<25		5			74	
Cyanide Total Phenols (mg/L)	80	<50	ND ND	0.009	ND 0.004	ND ND	31 ND	ND 0.01
Total Organic Carbon (mg/L)	ND	ND	טא 1.9/1.9	0.009	12.2	23.6	9.3/8	0.91 11/11

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW3	MW4	MW4	MW4	MU4	MU4	MW4	MW4
Date:	10/85	4/84	8/84	10/84	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)				ora free dae Latinoon oo eo eo eo eo eo co		www.TS notes of the world because of		
Antimony	ND	15	64	13,000	ND	ND	ND	ND
Arsenic	<10	49	6	11	ND	12	<10	18
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	4	3	3	ND	ND	ND	ND
Chromium	ND	ND	16	13,300	ND	ND	ND	ND
Copper	ND	ND	24	44	ND	ND	ND	ND
Lead	<50	18	39	12	ND	ND	ND	ND
Mercury	ND	ND	0.21	ND	ND	ND	ND	ND
Nickel	<5	60	47	180	20	20	<50	<20
Selenium	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	2	ND	1,240	NĐ	ND	ND	<8
Thallium	ND	4	3	ND	ND	ND	ND	ND
Zinc	ND	130	428	103	40	ND	<40	<20
Miscellaneous Parameters								
Cyanide	<25	ND	ND	33	ND	ND	<25	25.9
Total Phenols (mg/L)	<50	0.017	0.029	ND	ND	ND	51	<50
Total Organic Carbon (mg/L)	ND	76	137.9	81.2	60/61	NA	ND	ND

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

NA NA NA S	5 7 120	ND 7 248	1,030 ND 110	ND NO 100	ND ND ND	ND ND ND ND	<5 ND ND ND
NA NA	5 7	ND 7	1,030 ND	ND ND	ND ND	ND ND	ND ND
NA NA	5 7	ND 7	1,030 ND	ND ND	ND ND	ND ND	ND ND
NA	5	ND	1,030	ND	ND	ND	ND
NA	. ND	, nu	טוא			NU	<>
		ND	ND	ND	ND	ND	
NA NA		41	161	ND	ND	ND	<10
			_				ND
							ND
							<7
			A STATE OF THE PARTY OF THE PAR	_			ND
							ND ND
	_				117		ND
		45	11,900	ND	ND	ND	ND <10
otea) 							
·	4/84	8/84	10/84	1/85	4/85	7/85	10/85
					=		MW5
	Date: 12/86 t are oted) NA NA NA NA NA NA	Date: 12/86 4/84 t are oted)	Date: 12/86 4/84 8/84 there of the control of the c	Date: 12/86 4/84 8/84 10/84 to the core of	Date: 12/86 4/84 8/84 10/84 1/85 the care obted) NA 13 45 11,900 ND NA 73 9 11 ND NA NA ND NA NA ND ND ND ND ND NA NA ND 42 8,620 ND NA 80 113 127 ND NA 155 238 92 ND	Date: 12/86 4/84 8/84 10/84 1/85 4/85 the state of ted) NA 13 45 11,900 ND	Date: 12/86 4/84 8/84 10/84 1/85 4/85 7/85 the care obted) NA 13 45 11,900 ND

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW6A	MU6A	MW6A	MW6A	MW6A	MW6A	MW6B	MW6B
Date:	4/84	8/84	10/84	4/85	7/85	10/85	1/85	4/85
SEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)	spenies Joseph Littler technologie (N. 11 a 12 a							
Antimony	29	53	14,700	ND	ND	ND	ND	ND
Arsenic	73	15	17	76	47	49	ND	23
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	2	5	7	ND	ND	<4	ND	ND
Chromium	ND	30	51,600	ND	ND	ND	ND	ND
Copper	ND	ND	17	ND	ND	ND	ND	ND
Lead	27	16	10	ND	ND	ND	ND	ND
lercury	6	0.31	ND	ND	ND	ND	ND	ND
Nickel	110	30	164	20	ND	ND	ND	10
Selenium	ND	ND	ND	ND	<5	<10	ND	ND
Silver	10	ND	780	ND	ND	ND	ND	ND
Thallium	30	6	ND	ND	<5	ND	ND	ND
Zinc	60	75	48	10	<20	ND	ND	30
Miscellaneous Parameters								
Cyanide	ND	ND	ND	ND	<25	<25	NA	
Total Phenols (mg/L)	0.013	0.209	ND	0.220	200	289	NA NA	ND 0.120
Total Organic Carbon (mg/L)	455	271	181	410/410	ND	ND	NA NA	190/190

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW6B	MW7A	MW7A	MW7A	MW7A	MW7A	MW7A	MW7A	
Date:	10/85	4/84	8/84	10/84	1/85	4/85	7/85	10/85	
SEPA Priority Pollutant									
etals (Concentrations are									
in ug/L, except where noted)									
ntimony	ND	14	30	9,900	ND	ND	ND	ND	
rsenic	15	79	17	19	35	39	30	45	
eryllium	ND	ND	ND	ND	ND	ND	<1	ND	
admium	ND	11	2	ND	ND	ND	ND	<4	
hromium	ND	ND	ND	9,750	ND	ND	ND	ND	
opper	ND	ND	5	75	ND	ND	<9	ND	
ead	ND	18	14	6	ND	ND	ND	ND	
ercury	ND	ND	0.21	ND	ND	ND	ND	ND	
ickel	<20	ND	7	150	ND	ND	ND	ND	
elenium	<5	ND	ND	ND	ND	ND	ND	ND	
ilver	<8	ND	ND	1,810	ND	ND	ND	ND	
hallium	ND	ND	2	ND	ND	ND	ND	ND	
inc	<20	100	13	75	ND	ND	ND	60	
iscellaneous Parameters									
yanide	<25	26	ND	ND	ND	ND	<25	<25	THE STATE
otal Phenols (mg/L)	216	0.296	0.049	ND	0.058	ND	<50	205	
otal Organic Carbon (mg/L)	ND	19	225.4	37.7	13/15	160/160	ND	ND	1

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

	_		522			_	_	
Well Number:	MW7B	MW7B	MW7B	MW7B	MW7B	MW7B	MW7B	MW78
Date:	4/84	8/84	10/84	1/85	4/85	7/85	10/85	12/86
USEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	13	28	12,100	ND	ND	ND	ND	NA
Arsenic	168	110	40	ND	ND	<10	ND	NA
Beryllium	ND	ND	ND	ND	ND	<1	ND	NA
Cadmium	2	12	ND	ND	ND	ND	ND	NA
Chromium	ND	67	19,000	ND	ND	ND	ND	NA
Соррег	ND	108	59	ND	ND	<9	<10	NA
Lead	27	98	20	ND	ND	ND	ND	NA
Mercury	0.37	0.69	0.21	ND	ND	ND	ND	NA
Nickel	50	92	211	ND	ND	<30	<20	NA
Selenium	ND	ND	ND	ND	ND	ND	ND	NA
Silver	2	ND	2,660	ND	ND	ND	ND	NA
Thallium	3	3	ND	ND	ND	ND	ND	NA
Zinc	120	334	121	ND	ND	ND	<20	NA
Miscellaneous Parameters								
Cyanide	6	8	ND	ND	ND	<25	<25	ND
Total Phenols (mg/L)	0.038	0.081	ND	0.082	0.330	320	164.8	0.058
Total Organic Carbon (mg/L)	55	83.4	101	160/160	54/54	ND	ND	40.6/41.0

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	ASUM	MW8A	MW8A	A8WM	MW8A	A8WM	MW8A	MW8B
Date:	8/84	10/84	1/85	4/85	7/85	10/85	12/86	4/84
JSEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	51	10,200	ND	ND	ND	ND	NA NA	10
Arsenic	3	5	ND	ND	12	ND	NA	30
Beryllium	ND	ND	ND	ND	ND	ND	NA	ND
Cadmium	5	ND	ND	ND	ND	ND	NA	7
Chromium	25	5,120	ND	ND	ND	ND	NA	ND
Copper	5	37	ND	ND	ND	ND	NA	80
.ead	22	34	ND	ND	<100	ND	NA	199
lercury	ND	0.21	ND	ND	<.2	ND	NA	1.71
lickel	10	134	ND	ND	ND	ND	NA	200
Selenium	ND	ND	ND	ND	ND	ND	NA	ND
Silver	ND	1,180	ND	ND	ND	<10	NA	6
Thallium	7	ND	ND	ND	ND	ND	NA	ND
Zinc	52	136	50	ND	<20	<40	NA	390
discellaneous Parameters								
Cyanide	15	ND	ND	ND	<25	<25	ND	10
Total Phenols (mg/L)	0.446	ND	ND	0.460	380	467	0.117	0.003
Total Organic Carbon (mg/L)	64.8	65.6	71/75	280/290	ND	ND	21.8/22.4	22

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW8B	MW8B	MW8B	MW8B	MW8B	MW8B	8WM	MW9
Date:	10/84	1/85	4/85	7/85	10/85	12/86	12/86*	4/84
JSEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	8,500	ND	ND	ND	ND	NA	NA NA	30
Arsenic	14	ND	ND	<10	<10	NA	NA	55
Beryllium	ND	ND	ND	ND	ND	NA	NA	ND
Cadmium	ND	ND	ND	<10	<3	NA	NA	2
Chromium	39,500	ND	ND	ND	ND	NA	NA	ND
Copper	171	ND	ND	30	ND	NA	NA	50
ead	148	ND	ND	<100	ND	NA	NA	29
fercury	1.97	ND	ND	0.2	ND	NA	NA	0.39
lickel	314	ND	ND	ND	ND	NA	NA	60
Selenium	ND	ND	ND	ND	<5	NA	NA	ND
Silver	980	ND	ND	ND	ND	NA	NA	9
Thallium	ND	ND	ND	ND	<5	NA	NA	31
Zinc	578	ND	ND	30	<40	NA	NA	90
Miscellaneous Parameters								
Cyanide	ND	100	ND	<25	<25	ND	ND	18
Total Phenols (mg/L)	ND	ND	ND	160	160	ND	0.134	0.009
Total Organic Carbon (mg/L)	31.4	20/18	300/310	ND	ND	12.3/12.0	27.6/24.1	9

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW9	MW9	MW9	MW9	MW9	MW9	MW10	MW10
Date:	10/84	1/85	4/85	7/85	10/85	12/86	4/84	8/84
USEPA Priority Pollutant		.,	.,			·•		
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	44,800	ND	ND	ND	ND	NA NA	15	41
Arsenic	40	16	28	17	32	NA	127	32
Beryllium	ND	ND	ND	ND	ND	NA	ND	ND
Cadmium	ND	ND	ND	ND	ND	NA	3	8
Chromium	24,900	ND	ND	ND	NĎ	NA	110	32
Copper	192	ND	ND	ND	ND	NA	80	52
Lead	111	ND	ND	ND	<50	NA	62	104
Mercury	ND	ND	ND	ND	ND	NA	4	0.45
Nickel	380	ND	ND	ND	ND	NA	230	50
Selenium	ND	ND	ND	ND	ND	NA	ND	ND
Silver	2,800	ND	ND	ND	ND	NA	3	ND
Thallium	ND	ND	ND	ND	ND	NA	10	7
Zinc	298	ND	ND	<20	ND	NA	390	367
Miscellaneous Parameters								
Cyanide	14	35	ND	<25	27.8	ND	5	9
Total Phenols (mg/L)	ND	ND	ND	69	<50	0.432	0.004	0.008
Total Organic Carbon (mg/L)	44.1	13/12	7.3/6.8	ND	ND	8.09/8.13	32	98.9

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well N	Number:	MW10	MW10	MW10	MW10	MW10	MW11A	MW11A	MW11A
	Date:	1/85	4/85	7/85	10/85	12/86	4/84	8/84	10/84
SEPA Priority Pollutar	nt								
letals (Concentrations	are								
n ug/L, except where r	noted)								
ntimony		ND	ND	ND	ND		24	60	0.000
rsenic		35	30	16	11	NA NA	35	26	9,000
eryllium		ND	ND	ND	ND	NA NA	ND	ND	
edmium		ND ND	ND	<6	ND	NA NA	10	3 3	ND ND
romium Tromium		ND	ND	ND	ND	NA NA	ND	28	
		ND	ND	ND	ND	NA	ND ND	109	13,500 148
opper ead		ND	ND ND	ND	ND	NA NA	35	330	
ercury		ND	ND	ND	ND	NA NA	ND	1.14	353
ickel		ND	ND	ND	ND	NA NA	ND ND	30	ND 130
elenium		ND	ND	ND	ND	NA NA	ND ND	ND	120
ilver		ND	ND ND	ND	ND	NA NA			ND .
nattium		ND	_	ND	ND		8 7	ND	1,580
		40	ND	พบ <40		NA NA	÷	12	ND
inc		40	ND	<40	<20	NA	100	320	233
iscellaneous Parameter	rs								
vanide		25	ND 0.470	<25	<25	ND 0.474	37	6	10
otal Phenols (mg/L)		ND	0.130	69	<50	0.176	0.792	0.026	ND
otal Organic Carbon (m	ng/L)	23/22	53/56	ND	ND	22.4/20.9	42	19.6	31.8

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number	: MW11A	MW11A	MW11A	MW11A	MW118	MW11B	MW11B	MW118
Date	: 4/85	7/85	10/85	12/86	4/84	8/84	10/84	1/85
SEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	ND	ND	ND	NA	29	34	11,200	ND
Arsenic	33	33	16	NA	5	36	32	26
Beryllium	ND	ND	ND	NA	ND	ND	ND	ND
Cadmium	ND	ND	3	NA	2	12	ND	ND
Chromium	ND	ND	ND	NA	100	79	24,200	ND
Copper	ND	ND	<7	NA	70	134	119	ND
Lead	ND	ND	ND	NA	231	394	347	ND
Hercury	ND	ND	ND	NA	0.54	1.63	0.21	ND
Nickel	ND	ND	ND	NA	40	56	117	ND
Selenium	ND	ND	ND	NA	ND	ND	ND	ND
Silver	ND	ND	ND	NA	4	ND	1,090	ND
Thallium	ND	<5	ND	NA	12	15	ND	ND
Zinc	ND	ND	ND	NA	220	784	269	ND
Miscellaneous Parameters								
Cyanide	ND	<25	<25	ND	24	ND	26	33
Total Phenols (mg/L)	ND	270	<50	0.332	0.032	0.024	ND	ND
Total Organic Carbon (mg/L)	21/22	ND	ND	30.3/31.1	654	759.6	842	400/400

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		========			=========	========		========
Well Number:	MW11B	MW11B	MW11B	MW11C	MW11C	MW11C	MW11C	MW11C
Date:	7/85	10/85	12/86	1/85	4/85	7/85	10/85	12/86
USEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	ND	ND	NA NA	ND	ND	ND	ND	NA NA
Arsenic	44	32	NA	19	21	14	16	NA
Beryllium	ND	ND	NA	ND	ND	ND	ND	NA
Cadmium	ND	ND	NA	ND	ND	ND	ND	NA
Chromium	ND	ND	NA	ND	ND	ND	ND	NA
Copper	ND	<7	NA	ND	ND	ND	<7	NA
Lead	ND	ND	NA	ND	ND	ND	ND	NA
Mercury	ND	ND	NA	ND	ND	ND	ND	NA
Nickel	ND	NĐ	NA	ND	ND	ND	<10	NA
Selenium	ND	ND	NA	ND	ND	ND	<5	NA
Silver	ND	ND	NA	ND	ND	ND	ND	NA
Thallium	ND	ND	NA	ND	ND	ND	<5	NA
Zinc	ND	ND	NA	ND	ND	ND	ND	NA
Miscellaneous Parameters								
Cyanide	<25	<25	ND	ND	ND	<25	<25	ND
Total Phenols (mg/L)	190	<50	ND	ND	ND	270	70.1	0.289
Total Organic Carbon (mg/L)	ND	ND	594/588	51/52	33/32	ND	ND	9.83/10.4

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

			=======		**********	:=======	========	========	===
Well Number:	MW12	MW12	MW12	MW12	MW13	MW13	MW13	MW13	
Date:	4/85	7/85	10/85	12/86	1/85	4/85	7/85	10/85	
JSEPA Priority Pollutant									
Metals (Concentrations are									
in ug/L, except where noted)									
Antimony	ND	ND	ND	NA	ND	ND	ND	ND	
Arsenic	ND	ND	<10	NA	ND	10	ND	<10	
Beryllium	ND	ND	ND	NA	ND	ND	ND	ND	
Cadmium	ND	ND	ND	NA	ND	ND	ND	ND	
Chromium	ND	ND	ND	NA	ND	ND	ND	ND	
Copper	ND	ND	<7	NA	ND	ND	ND	ND	
Lead	ND	ND	ND	NA	ND	ND	ND	ND	
Mercury	ND	ND	ND	NA	ND	ND	ND	ND	
Nickel	ND	ND	ND	NA	ND	ND	ND	ND	
Selenium	ND	ND	ND	NA	ND	ND	ND	ND	
Silver	ND	ND	<10	NA	ND	ND	ND	ND	
Thallium	ND	ND	NA	NA	ND	ND	ND	ND	
Zinc	ND	ND	ND	NA	ND	ND	ND	ND	
Miscellaneous Parameters									
Cyanide	ND	<25	<25	ND	ND	ND	<25	25	
Total Phenols (mg/L)	ND	140	<50	0.110	ND	0.094	<50	560	
Total Organic Carbon (mg/L)	31/31	ND	ND	27.9/23.7	110/110	120/120	ND	ND	

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number: Mw14 Mw14 Mw14 Mw15 Mw15 Date: 4/85 7/85 10/85 12/86 1/85 4/85					=======:	====			
Well Number:	MW14	MW14	MW14	MW14	MW15	MW15	MW15	MW15	
Date:	4/85	7/85	10/85	12/86	1/85	4/85	7/85	10/85	
USEPA Priority Pollutant								-	
Metals (Concentrations are									
in ug/L, except where noted)									
Antimony	ND	ND	ND	NA	ND	ND	ND	ND	• • • •
Arsenic	ND	<10	15	NA	ND	ND	<10	13	
Beryllium	ND	ND	ND	NA	ND	ND	ND	ND	
Cadmium	ND	ND	ND	NA	ND	10	ND	4	
Chromium	ND	ND	ND	NA	ND	ND	ND	ND	
Copper	ND	ND	<7	NA	ND	ND	ND	<7	
Lead	ND	ND	ND	NA	ND	ND	ND	ND	
Mercury	ND	ND	ND	NA	ND	ND	ND	ND	
Nickel	ND	ND	<10	NA	ND	ND	ND	<10	
Selenium	ND	<5	ND	NA	ND	ND	ND	5	
Silver	ND	ND	ND	NA	ND	ND	ND	ND	
Thallium	ND	ND	ND	NA	ND	ND	ND	ND	
Zinc	ND	ND	ND	NA	ND	ND	ND	<20	
Miscellaneous Parameters									
Cyanide	ND	<25	<25	ND	30	ND	·	<25	
Total Phenols (mg/L)	0.180	910	52.1	0.388	ND	ND	300	<50	
Total Organic Carbon (mg/L)	390/390	ND	ND	412/412	9.7/9.8	11/11	ND	ND	5.9

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		==========				=========		
Well Number:	MW16	MW16	MW16	MW16	MW17	MW17	MW17	MW17
Date:	1/85	4/85	7/85	10/85	1/85	4/85	7/85	10/85
USEPA Priority Pollutant								·
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND	<7	ND
Chromium	ND	ND	ND	ND	ND	ND	ND	ND
Copper	ND	ND	ND	<7	ND	ND	ND	<7
Lead	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	ND	ND	ND	ND	10
Selenium	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	<5	ND	ND	ND	ND	ND
Zinc	ND	ND	ND	ND	30	40	ND	20
Miscellaneous Parameters								
Cyanide	46	ND	<25	28.3	48	ND	<25	<25
Total Phenols (mg/L)	0.073	ND	<50	<50	0.088	ND	<50	<50
Total Organic Carbon (mg/L)	17/18	25/26	ND	ND	7.4/7.8	4.2/3.9	ND	ND

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW18A	MW18A	MW18A	MW18A	MW18B	MW18B	MW18B	MW18B	
Date:	4/85	7/85	10/85	12/86	1/85	4/85	7/85	10/85	
USEPA Priority Pollutant				,	.,	.,		,	
Metals (Concentrations are									
in ug/L, except where noted)									
Antimony	ND	ND	ND	NA	ND	ND	ND	ND	
Arsenic	ND	18	12	NA	ND	ND	0.33	ND	
Beryllium	ND	ND	ND	NA	ND	ND	2	ND	
Cadmium	5	ND	ND	NA	ND	ND	<10	ND	
Chromium	ND	ND	ND	NA	ND	ND	<30	ND	
Copper	ND	<10	ND	NA.	ND	ND	120	ND	
Lead	ND	ND	<50	NA	ND	ND	700	ND	
Mercury	ND	<.2	ND	NA	ND	ND	6	ND	
Nickel	ND	<30	ND	NA	ND	ND	60	ND	
Selenium	ND	<5	ND	NA	ND	ND	ND	ND	
Silver	ND	ND	ND	NA	ND	ND	ND	ND	
Thallium	ND	ND	ND	NA	ND	ND	<5	ND	
Zinc	ND	40	20	NA	20	20	1,600	ND	
Miscellaneous Parameters									
Cyanide	ND	<25	<25	ND	400	170	580	141	
Total Phenols (mg/L)	0.077	170	130	0.106	ND	ND	120	<50	
Total Organic Carbon (mg/L)	NA	ND	ND	12.5/12.5	14/17	23/23	ND	ND	

^{*} Replicate sample.

ND Not detected.

NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

		=========	=========			:========	=======================================	
Well Number:	MW19	MW19	MW19	MW19	MW19	MW20	MW20	MW20
Date:	1/85	4/85	7/85	10/85	12/86	1/85	4/85	7/85
USEPA Priority Pollutant								
Metals (Concentrations are								
in ug/L, except where noted)								
Antimony	ND	ND	ND	ND	NA NA	ND	ND	ND
Arsenic	60	ND	ND	<10	NA	ND	ND	<10
Beryllium	ND	ND	<1	ND	NA	ND	ND	ND
Cadmium	ND	ND	ND	ND	NA	ND	ND	ND
Chromium	ND	ND	ND	ND	NA	ND	ND	ND
Copper	ND	ND	ND	ND	NA	ND	ND	ND
Lead	ND	ND	ND	ND	NA	ND	ND	ND
Mercury	ND	ND	ND	ND	NA	ND	ND	<.2
Nickel	ND	ND	<30	ND	NA	20	20	<30
Selenium	ND	ND	ND	ND	NA	ND	ND	ND
Silver	ND	ND	<10	<8>	NA	ND	ND	ND
Thallium	NĐ	ND	ND	ND	NA	ND	ND	ND
Zinc	20	10	20	40	NA	ND	6	ND
Miscellaneous Parameters								
Cyanide	48	ND	<25	<25	ND	730	2.700	660
Total Phenols (mg/L)	0.120	0.200	400	852	0.399	0.94	ND	60
Total Organic Carbon (mg/L)	46/47	58/58	ND	ND	45.2/46.2	13/14	12/12	ND

^{*} Replicate sample.
ND Not detected.
NA Not analyzed.

Table 7. Summary of Metals and Miscellaneous Parameters in Ground Water, J.F. Queeny Plant, Monsanto Company, St. Louis, Missouri.

Well Number:	MW20	XFB1	XFB1	XFB2	XFB2
Date:	12/86	10/85	12/86	10/85	12/86
USEPA Priority Pollutant					
Metals (Concentrations are					
in ug/L, except where noted)					
Antimony	NA.	ND	NA	ND	NA
Arsenic	NA	ND	NA	ND	NA
Beryllium	NA	ND	NA NA	ND	NA
Cadmium	NA	ND	NA	ND	NA
Chromium	NA	ND	NA	ND	NA
Copper	NA	ND	NA	ND	NA
Lead	NA	ND	NA	ND	NA
Mercury	NA	ND	NA	ND	NA
Nickel	NA	ND	NA	ND	NA
Selenium	NA	ND	NA	<5	NA
Silver	NA	ND	NA	ND	NA
Thallium	NA	ND	NA	ND	NA
Zinc	NA	ND	NA	20	NA
Miscellaneous Parameters					
Cyanide	22.5	<25	ND	<25	ND
Total Phenols (mg/L)	ND	<50	ND	133	0.124
Total Organic Carbon (mg/L)	13.5/12.5	ND	2.49/2.34	ND	1.4/1.5

^{*} Replicate sample.

ND Not detected. NA Not analyzed.

Well Identification: Parameter	MU 1A	MW 1B	MW 2A	MW 2B	MW 3	MW 4	MW 5	MW 6A	MW 68	MW 7A	MW 7B	MW 8A	₩₩ 88	M U 9	MW 10	MW 11A	MW 118	MW 11C	MW 12	MW 13	MW 14	MW 15	MW 16	MW 17	MW 18A	MW 188	M₩ 19	MW 20	Number of Wells where Compound Detected
Benzene, 1-chloro-2-methyl								х				х																	2
Benzene, 1-chloro-3-methyl								X																					1
Benzene, 3-methylethyl						X																							1
1-Pentene,4,4-dimethyl										X																			1
1,1,1,2-Tetrachloroethane							X																						1
3-Chlorocyclohexane							X																						1
3,3,3-Trichloro-1-propene	X	X		X		X	X							X			• •		X					X					8
4-Chlorocyclohexanol							х																						1
1,2-Dichlorocyclohexane							Х																						1
1-Bromo-2-chlorocyclohexane							X																						1
1,2-Dimethylbenzene											X																		1
1,3-Dimethylbenzene											X																		1
1,4-Dimethylbenzene											X																		1
Cyclohexane										X																			1
2-(ethenyloxy)-ethanol										X																			1
1,1-oxy-bis-Butane												X																	1
Зн-pyrazol-3-one,2,4,-dihydro-5-methyl													X											X					2
Cyclopentene													X											X					2
2-Butoxy ethanol																			X				X				X		3
Benzoic acid, 3-methyl	X	X	X									X													X				5
Benzoic acid, 4-(1,1-dimethylethyl)	X		X							X															X				4
Dodecanoic acid	X	X	X																			X			X		X		6
Hexadecanoic acid						X																							1
Hexadecanoic acid, 1-methylethyl ester		X		X						X											•-								3
Hexadecanoic acid, 1-methyl ester					Х		X																						2
9-Hexadecanoic acid												X	X	X													X		4
Hexanedioic acid, dioctylester	X		X																			X	••						3
			====	====	====	====	====	====	====:	====	====	====	====	====	====	====	====	====	====	====	====	====	====	====	====	====	====	.===:	

Well Parameter	Identification:	MU 1A	MW 1B	MW 2A	MW 2B	MW 3	MW 4	MW 5	MW 6A	MW 6B	MU 7A	MW 7B	MW 8a	MW 8B	MW 9	MW 10	MW 11A	MW 118	MW 11C	MW 12	MW 13	MW 14	MW 15	MW 16	MW 17	MW 18a	MW 18B	MU 19	MW 20	Number of Wells where Compound Detected
Depression 2-shless																	• • • • •										· ·			11
Benzenamine,2-chloro Benzenamine,3-chloro		X				Ŷ					X					×				 v						Ŷ	Ŷ		х	12
Benzenamine,4-chloro						Ŷ			v			X														Ŷ	×			10
Benzenamine, 2,6-dichloro							¥		Ŷ																x					5
Benzenamine, 2, 3-dichloro							Y			¥										¥	X		x		X				x	9
Benzenamine,3,5-dichloro																x											x			2
Benzenamine, 2-ethyl																						x								•
Benzenamine, 2, 6-diethyl							¥				¥		X							x	x	X	x					х		
Benzenamine								х	x			x									X					х	х			7
Benzenamine,4-ethoxy							х		X	х			X													X	X			ć
Benzenamine, 2,6-bis(1-methylethyl)																						X								1
Benzenamine, N, N, 3, 5-tetramethyl							••																						х	1
Methanamine, N-(1-phenyl ethylidene)																										X			1
Acetamide, 2-chloro-N-(2,6-diethylp												••										X							х	2
N-(methoxy methyl)	•						X					• •																		1
Diethyl phenol																						Х								•
2-Methylphenol		• •							Х																					1
2-ethoxyphenol									х	х			X													X				
Benzenesulfonamide, 2-methyl									X	Х																				2
Benzenesul fonamide, 4-methyl									X	X	X		X													X				5
Benzenesul fonamide, N-ethyl-4-methy	t								X	Х	X		X											X	X					6
Benzenesulfonamide, N-butyl-4-methy													X																	1
Benzenesulfonamide, N-cyclohexyl-4-													X												X					2
Ethoxybenzene										X																				1
Benzene, 1, 1-sulfonyl bis(2-methyl)										X																				1
Benzene 1-(1,1-dimethylethyl)																	X													1
2,6-Decadienoic acid				• -				••			X																			1
Silane											X																			1
Decanedoic acid											X																			1
1-H-Furan-6-amine											х		х	Х																3

Well Identification	MW on: 1A		MW 2A	MW 2B	MW 3	MW 4	MW 5	MW 6A	MW 6B	MW 7A	MW 7B	MW 8A	MW 8B	MW 9	MW 10	MU 11A	MW 11B	MW 11C	M₩ 12	MW 13	MW 14	MW 15	MW 16	MW 17	MW 18a	MW 188	MW 19	MW	Number of Wells where Compound Detected
Parameter																												. 	
4-Chlorophenol		••									X	X		••													X		3
2-Chloro-4-nitrophenol				••							X																		1
Cyclohexene,3(chloromethyl)												X													•-				1
Decane,2,5,9-trimethyl													X																1
1,3-Isobenzofurandione																X	X	X	X	X									5
1H-3H-Naphtho(1,8-cd)pyran-1,3-dione															X	X	X	X	X	X									6
1H-Idene,2,3-dihydro	••				X																								1
9,10-Anthracenedione	••															X	X	X	X	X									5
IH-Idene-1,3-(2H)-dione																	X												1
1H-Idene-1-one, 2-diazo-2, 3-dihydro-3-phenyl																			X										1
Pyridine,3-ethenyl																			X										1
1-Propanone, 1-phenyl																				X									1
Benzo(e)cinnoline																				X									1
Benzene,1,1-oxybis																								X					1
Nanoic acid																									X	X		X	3
Acetic acid, pentyl ester	x	X		X						X	X	X	X								X	X				X			10
1H-Indole,5-methoxy-2-methyl																											X		1
Octamethyl cyclotetrasiloxane	x														X														2
1,1'-Biphenyl		X																					X						2
Benzene 1,1'-oxybis		X		+-																									1
2-Chloronitrobenzene																Х					Х								2
1-Chloro-4-nitrobenzene					X					X	X	X									Х				X				6
1-Chloro-3-nitrobenzene										X	X	X								X	X	X			X				7
1-Chloro-2-nitrobenzene	×		х		X					X	X	X													X				7
1-methylethyl benzene						X															••		•-						1
3H-Indole-3-one,2-(methylthio)								Х	X																••				2
3H-Indazol-3-one												X																	1
3-Phenyl pyridine										••		X					•-							••					1
Nonane, 2-methyl													х												Х				2
Nonane, 2,8-dimethyl-4-methyl																													

.. . .

																													Number of Wells wher
	MU	MU	MU	MU	MLI	MU	ML	MU	MLI	ML	MU	MU	MU	MU	MLI	ML	ML	MU	MLI	MU	Compound								
Well Identification		18	2A	2B	3	4	5	6A	6B	7A	7B	8A	88	9	10	11A	11B	11C	12	13	14	15	16	17	18A	188	19	20	Detected
Parameter																													
Decane, 2-methyl									•••				X														••		•-•
Decane, 2,4-dimethyl	••												X									••							
Decane, 3,8-dimethyl		••											X																
Undecane, 3,8-dimethyl				••									X																
Cyclopropane, nonyl													X																
Cyclopentane, 1-pentyl-2-propyl													X																
7-Hexadecane													X																
2-Undecene,5-methyl													X																
Phosphoric acid triethyl ester															X														
Elemental sulfur			X				Х						X			X											X		
Cyclotetradecane																X													
1H-Indene-1-one,2,3-dihydro																	X											X	
Phenol,2,6-bis(1,1-dimethylethyl)-4-methyl																	X												
Decanedoic acid,bis(2-ethylhexyl)ester																	X			X									
Methanamine, N-(1-phenylethylio) **																									X	X			
7-Chlorobenzofuran																				X						X			
1-Methylnaphthalene																								X	X				
Octadecanoic acid																									X				
Isopropyl myristate				X			X																						
Tosyl derivative of ethylamine						X																							
1-H-imidazole,4,5-dihydro						X																							
3-Nitro,1,2-Benzenedicarboncylic acid	x												X																
1,1-Biphenyl,2-fluoro-2-(4-methoxy-phenyl)						X																X							
1-(1,1-dimethylethyl)-4-ethoxybenzene																X													
Anthraquinone-1-carboxylic acid																	X						••						
4-4-(1-methyl ethylidene)(bis)phenol										X										••				••					
1-methyl-2-pyrrolidinone										X						X				••					••				
2-phenyl-4-acetyl-5-bromo-thiazole						X																							
2-Cyclohexane-1-one	х									••				••					••			••							
Benzothiazole	x																												

Benzaldehyde,4-hydroxy-3-methoxy Phenol,4-nonyl Fluorobiphenol 3-Penten-2-one,4-methyl Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)		х 	x						6B	7A	7B	8A	88	9	10	11A	11B	11C	12	13	14	15	16	17	18A	188	19	20	Compound Detected
2-Ethyl hexanoic acid Benzaldehyde,4-hydroxy-3-methoxy Phenol,4-nonyl Fluorobiphenol 3-Penten-2-one,4-methyl Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)																													
Benzaldehyde,4-hydroxy-3-methoxy Phenol,4-nonyl Fluorobiphenol 3-Penten-2-one,4-methyl Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)	••		v			••						 v																	
Phenol,4-nonyl Fluorobiphenol 3-Penten-2-one,4-methyl Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)	••		Ŷ																										
Fluorobiphenol 3-Penten-2-one,4-methyl Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)			Ŷ																										
3-Penten-2-one,4-methyl Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)			^				v															~				~			
Methylbenzene Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)							Ŷ															^							•
Chlorobenzenamine (NOS) Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)	•-	••				••		¥		y	X		 ¥												y	¥			
Chloromethyl benzene (NOS) Benzeneamine,dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)					~		v	X		Ŷ					v											Ŷ			,
Benzeneamine, dichloro (NOS) 1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)								Ŷ																					
1,3-Dinitrobenzene 2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)					¥			Ŷ	¥																				
2,5-Cyclohexadiene-1,4-Dione Alkane (NOS) Cyclohexene (NOS)								Ŷ																					
Alkane (NOS) Cyclohexene (NOS)									¥																				
Cyclohexene (NOS)							¥			¥															¥				
•	¥		¥							Ŷ		x	x					¥								¥			
2-chloro-5-methyl Pyridine										×																			
2-chloro-5-nitrobenzenamine											¥																¥		
1-Bromo-4-nitrobenzene											Ŷ																		
1,4-dichloro-2-nitrobenzene											Ŷ																		
(Butoxymethyl)benzene												¥																	
2-naphthalene carboxylic acid																¥													
Ethenyl cyclobutane													¥													X			
2-methyl-3-hydroxy-2,4,4-trimethyl pentyl ester														¥															•
Pentadecafluoro-octanoic acid														Y															
Diphosphoric acid, tetraethyl ester															¥								x						;
Propanoic acid, 2-methyl-1,1(1,1-dimethyl(ether))		¥	x	x		X	¥								x														
-2-methyl-1,3-propanediyl ester		^	^	^		^	^								^														,
1H-Idene, 1-ethylidene																	x											••	
Tetradecane																	x												
Tetradecane-2-methyl																	Ŷ												
4,7-dimethyl-1,3-Isobenzofurandione																													

																													Number of
																													Wells where
Hali Adamidian	MV	MV	MW 2A	MW 2B	MW	MW	MW	HW	MW	MV	MW	MU	MW 8B	MW	MW	WW	MW	MW	MW	MW 13	MW	MW	MW	MW	MW	MW	MW 19	MW 20	Compound Detected
Well Identification: Parameter	TA	18	4 A	28	3	4	5	6A	68	7A	7B	88	ОВ	9	10	11A	118	HU	12	13	14	15	10	17	IOA	108	17	20	petected
Biphenylene																	х						•						1
9H-Fluoren-9-one																	X												1
11H-dibenzo[c,f],[1,2]diazopine																	X												1
1(3H)-Isobenzofuranon,3-(3-oxa-1(3H))-isobenzofuran	٠																X												1
2-cyclohexen-1-01																		X											1
Tridecane,5-propyl																		X											1
2-Propenoic acid,3-phenyl-methylester																		X											1
2-Penten,3,4-dimethyl																		X											1
5,5-phenyl-2(5H)-Furanone							-+													X									1
2-Propanol																					X								1
2-Butanol, 2, 3-dimethyl		••																					X						1
Undecane, 4,6-diemthyl																							X						1
Decane,2,3,5-trimethyl										••													X						1
Decane,5-propyl																							X						1
Ethylcyclobutane																								X					1
Benzenamine hydrochloride																								X					1
2-Methyl naphthalene																									X				1
Methyl cycloheptane																											X		1
2,4-Diemthyl hexane																											X		1
3-ethyl-3-heptene																											X		1
Benzene, 1-ethenyl-2-methyl																											X		1
Pentanoic acid			X																										1
2-Ethylhexanoic acid			X																										1
4-hydroxy-3-methoxy benzaldehyde			X																										1
2,3-dihydro-1H-Indene						X																	••						1
								====													====	====	====	====			====		

	****	Z Z Z Z		-			.====		====	.===:	====		====	====	====	====	====	====	====	====	====	====	====	====	====	====	====	====	
																													Number of
																													Wells where
	MU	MW	MH	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	Compound
Well Identification:	1A	1B	2 A	2B	3	4	5	64	6B	7A	7B	88	88	9	10	11A	118	11C	12	13	14	15	16	17	18A	18B	19	20	Detected
Parameter																													
Chloro N-diethyl phenyl methoxy-acetamide							X																						1
Benzenemethanethiol								X																					1
4-Methyl benzenesulfonamine									X																				1
Trimethyl benzene											X																		1
Chloronitrobenzene			• •								X	X													X				3
Phenol, 2-ethoxy			••									X																	1
4-(Diethylamino)-benzaldehyde			••								•-	X																	1
Dibenzofuran												• •								X									1
Benzeneacetic acid																					X								1

Total Number of Compounds: 13 9 16 5 9 15 16 19 12 26 20 32 22 4 10 10 16 9 11 16 11 8 8 12 22 16 12 6

NOTE: NOS = Not otherwise specified

- * These compounds have been tentatively identified by Envirodyne Engineers, Inc. of St. Louis, Missouri, and ETC of Edison, NJ. As the organic group for many of these compounds could not be agreed upon by the laboratories, this list of compounds has not been separated into the categories of volatile organics, acid extractable and base/neutral extractable compounds.
- X Tentative identification without quantification.
- ** This incomplete compound name appears in the original table.

Blanks indicate not detected.

Table 9. Concentration of Tetrachloroethylene (PCE) in Soil Samples Collected in the Vicinity of the Leaking PCE Tank, J.F. Queeny Plant, Monsanto Chemical Company, St.Louis, Missouri.

Boring Number	Depth of Sample (ft)	Screening Results (ppm HNu units)	PCE Concentration (micrograms/kilogram)
A	10 - 11.5	30	Not detected
В	10 - 11.5	20	225.3
С	10 - 11.5	110	104.6
D	10 - 11.5	20+	Not detected
E	5 - 6.5	100	1,933.0
F	Not collected		
G	10 - 11.5	10	Not detected
Н	10 - 11.5	70	33.3

Samples were collected by ESE and analyzed by ETC.

ppm Parts per million.

Table 10. Concentration of Tetrachloroethylene (PCE) in Ground-Water Samples Collected in the Vicinity of the Leaking PCE Tank, J.F. Queeny Plant, Monsanto Chemical Company, St. Louis, Missouri.

Well Identification	PCE Concentration (micrograms/liter)
MW-A	225,832
MW-A*	859,560,000
MW-B	27,954.2
MW-C	Not detected
MW-D	Below detection limit

^{*} Sample of free-phase liquid in bottom of well.
Samples were collected by ESE and analyzed by ETC.

Table 11. Concentrations of Alachlor and Associated Compounds in Ground-Water Samples Collected near the Lasso Production Area, J. F. Queeny Plant, Monsanto Chemical Company, St. Louis, Missouri.

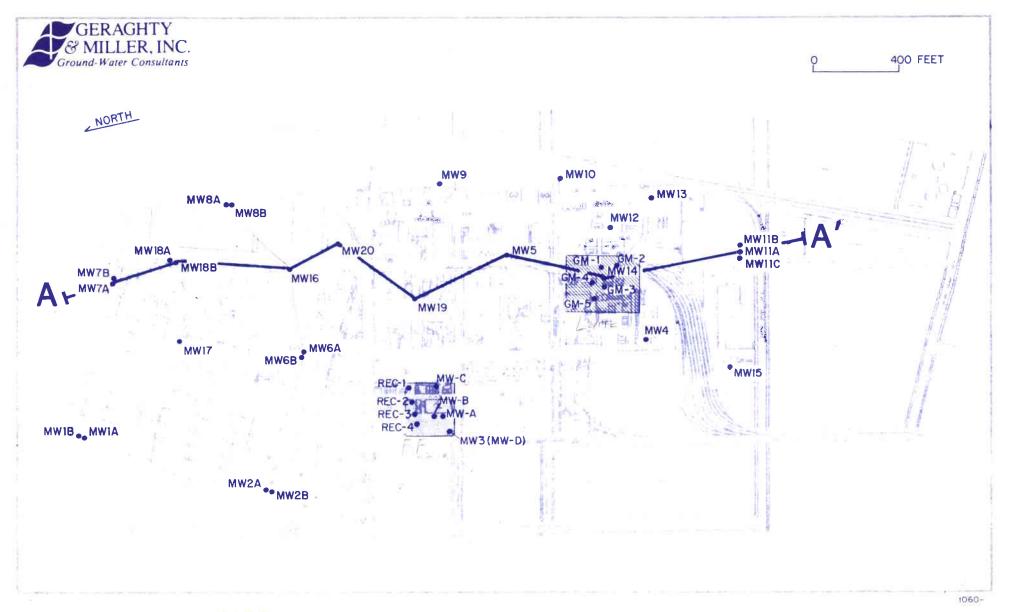
			1	Well D	<u>esignati</u>	<u>on</u>		
Parameter	Detection Limits (mg/L)	GM-1	GM-2	GM-3	GM-4	GM- 5	MW-14	Solubility in Water
Alachlor	3	169	162	6	ND	4	1,010	100 mg/L @ 10 ⁰ C
Chlorobenzene	50	143	114	42	ND	770	409	500 mg/L @ 20 ⁰ C
2,6-Diethylaniline	3	ND	ND	44	1,807	ND	23	14,000 mg/l @ 12°C
Acetyl alachlor	10	20	24	29	ND	ND	67	100 mg/L @ 20°C
CP31679	10	20	10	ND	ND	ND	ND	~ 100 mg/L @ 20°C
Unidentified high boilers	-	ND	ND	ND	1,785	2	99	-

ND Not detected.

Samples were collected by Geraghty & Miller, Inc. and analyzed by Monsanto.

Not determined.

mg/L Milligrams per liter.



MW5

WELL DESIGNATION AND LOCATION

AREA OF LASSO INVESTIGATION



AREA OF PCE INVESTIGATION

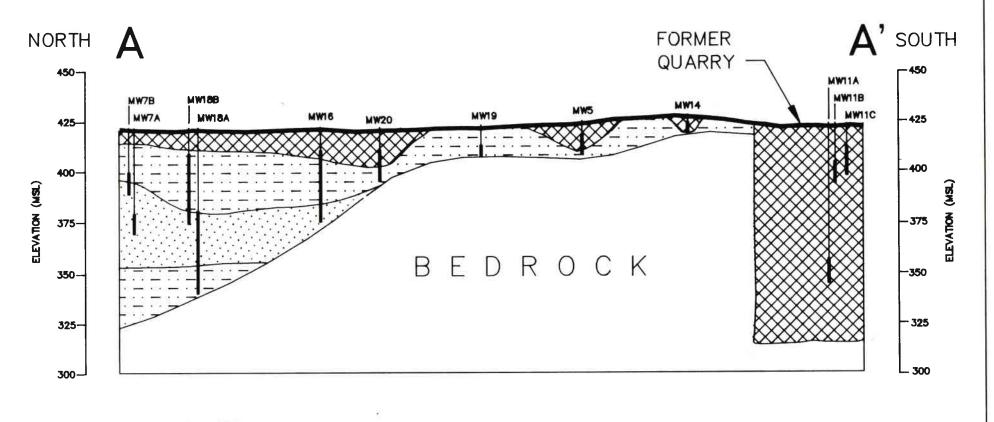
WELL LOCATIONS AND LINE OF SECTION A-A'

MONSANTO CHEMICAL COMPANY



COMPILED In:	L. Musiker	DATE: 3-88	SCALE
PREPARED Tr:	G. Schaffner		SHOWN
PROJECT	D. Colton	N308QU	3-1060

MONSANTO CHEMICAL COMPANY J.F. Queeny Plant/ St. Louis, Missouri





FILL MATERIAL

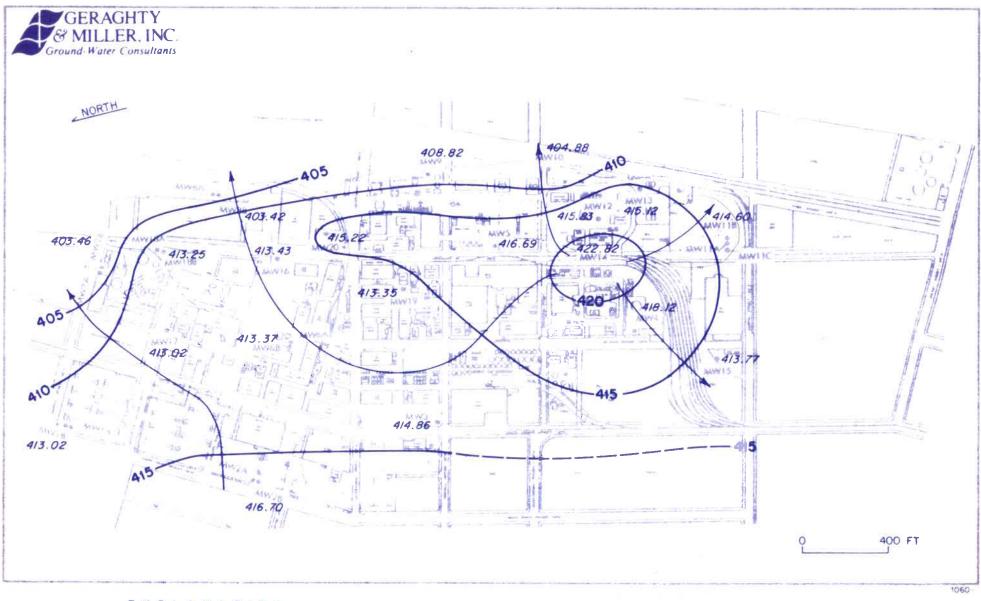
SAND AND GRAVEL

SILT, CLAY, AND SILTY SAND

500 FT (VERTICAL EXAG. = 5X)

SUBJECT:

GENERALIZED HYDROGEOLOGIC CROSS SECTION



.MWIB WELL DESIGNATION AND LOCATION

413.02 WATER-LEVEL ELEVATION

410 LINE OF WATER-LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL

GROUND - WATER FLOW DIRECTION

NOTE WATER-LEVEL MEASUREMENTS MADE BY ESE

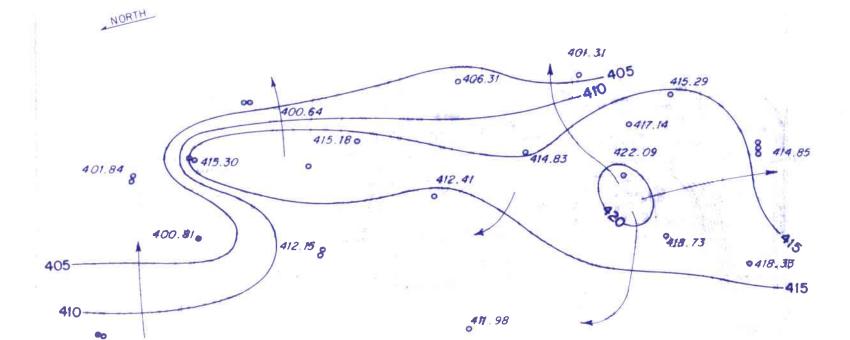
CONFIGURATION OF THE WATER TABLE APRIL 17-24, 1985

MONSANTO COMPANY



411.53

O 400 FEET



90 414 41

EXPLANATION

o WELL DESIGNATION AND LOCATION

414.41 WATER-LEVEL ELEVATION

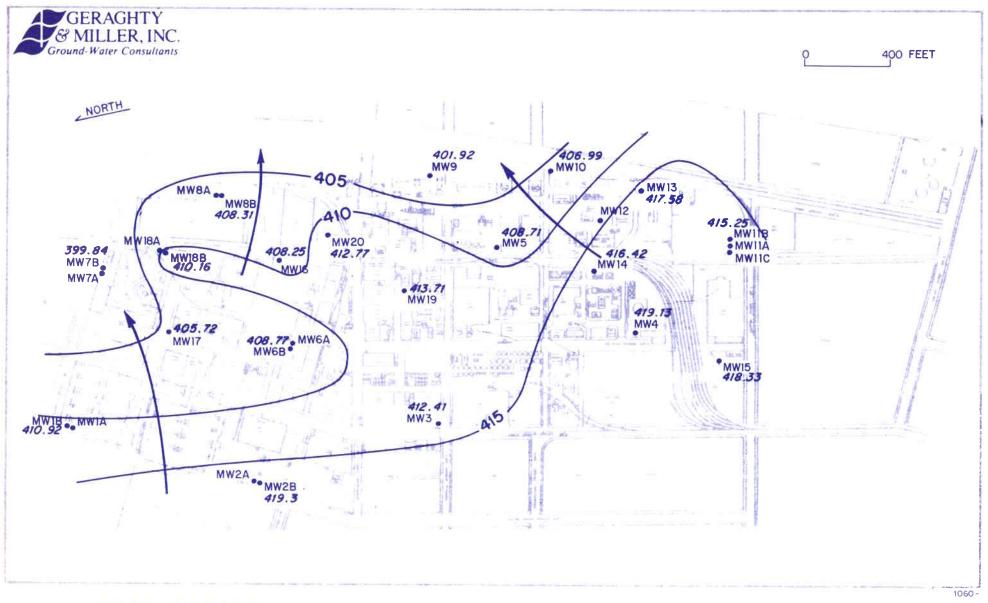
410 -- LINE OF WATER-LEVEL ELEVATION IN FEET ABOVE MEAN SEA LEVEL

GROUND - WATER FLOW DIRECTION

NOTE . WATER - LEVEL MEASUREMENTS MADE BY ESE

CONFIGURATION OF THE WATER TABLE DECEMBER 1, 1986

MONSANTO CHEMICAL COMPANY



MW5 WELL DES

NOTE

WELL DESIGNATION AND LOCATION

408.71 WATER-LEVEL ELEVATION

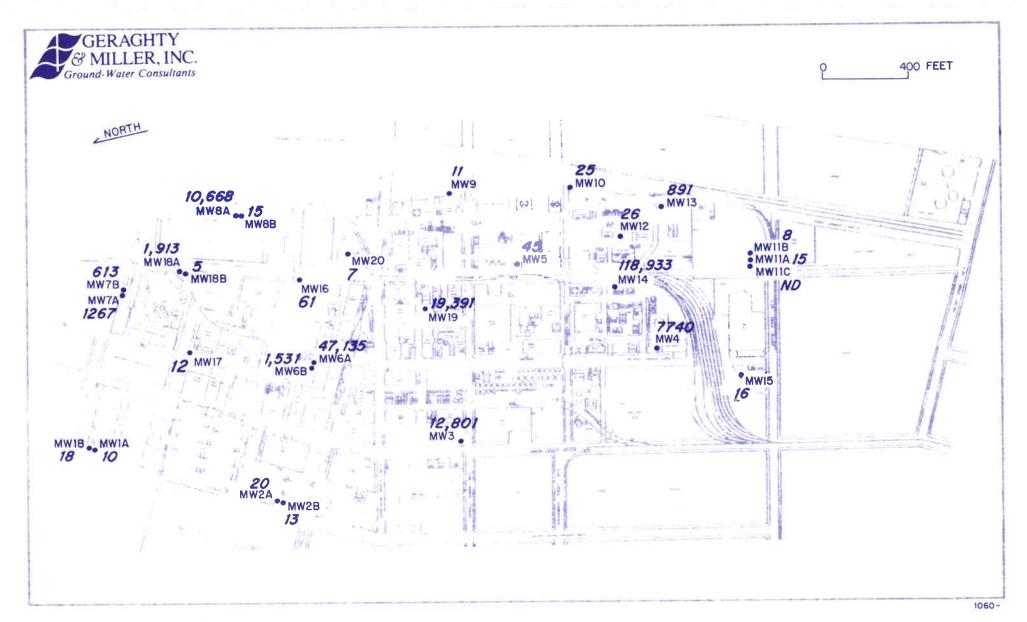
-405- LINE OF WATER-LEVEL ELEVATION, IN FEET ABOVE MEAN SEA LEVEL

GROUND - WATER FLOW DIRECTION

WATER - LEVEL MEASUREMENTS MADE BY ESE

CONFIGURATION OF THE WATER TABLE SEPTEMBER 23, 1987

MONSANTO CHEMICAL COMPANY



MW5 WELL DESIGNATION AND LOCATION

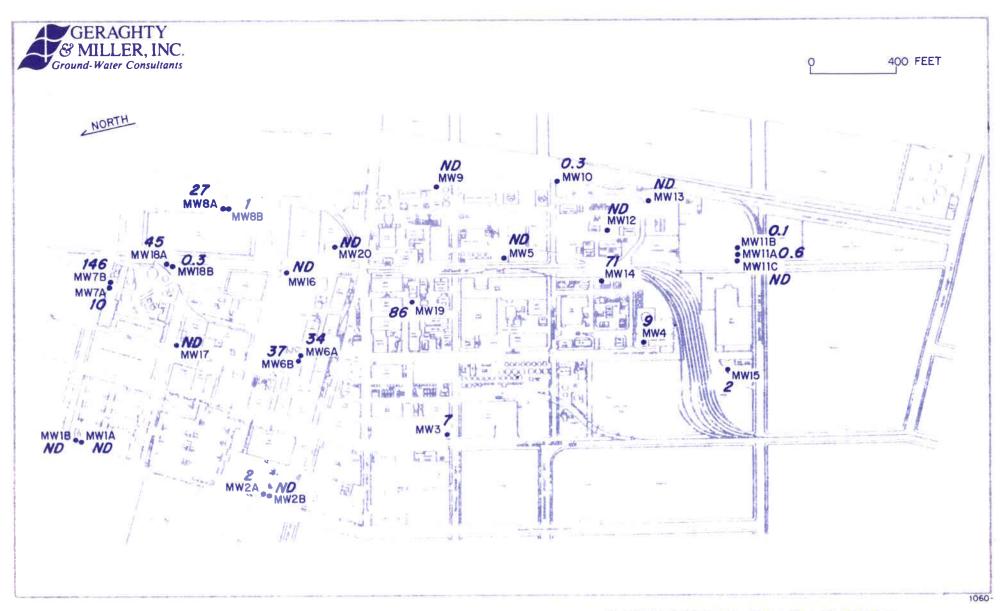
25 MEAN TOTAL VOLATILE ORGANIC COMPOUNDS, MICROGRAMS PER LITER

NO NOT DETECTED

DISTRIBUTION OF MEAN TOTAL VOLATILE ORGANIC COMPOUNDS IN GROUND WATER

MONSANTO CHEMICAL COMPANY

J.F. QUEENY PLANT St. Louis, Missouri



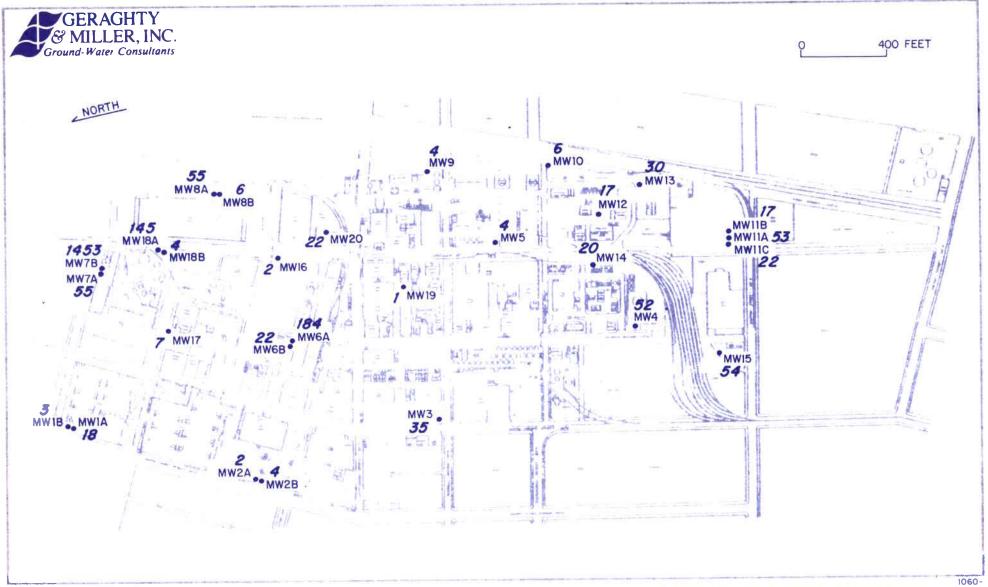
MW5 WELL DESIGNATION AND LOCATION

6.5 MEAN TOTAL ACID EXTRACTABLE ORGANIC COMPOUNDS, MICROGRAMS PER LITER

NOT DETECTED

DISTRIBUTION OF MEAN TOTAL ACID EXTRACTABLE ORGANIC COMPOUNDS IN GROUND WATER

MONSANTO CHEMICAL COMPANY

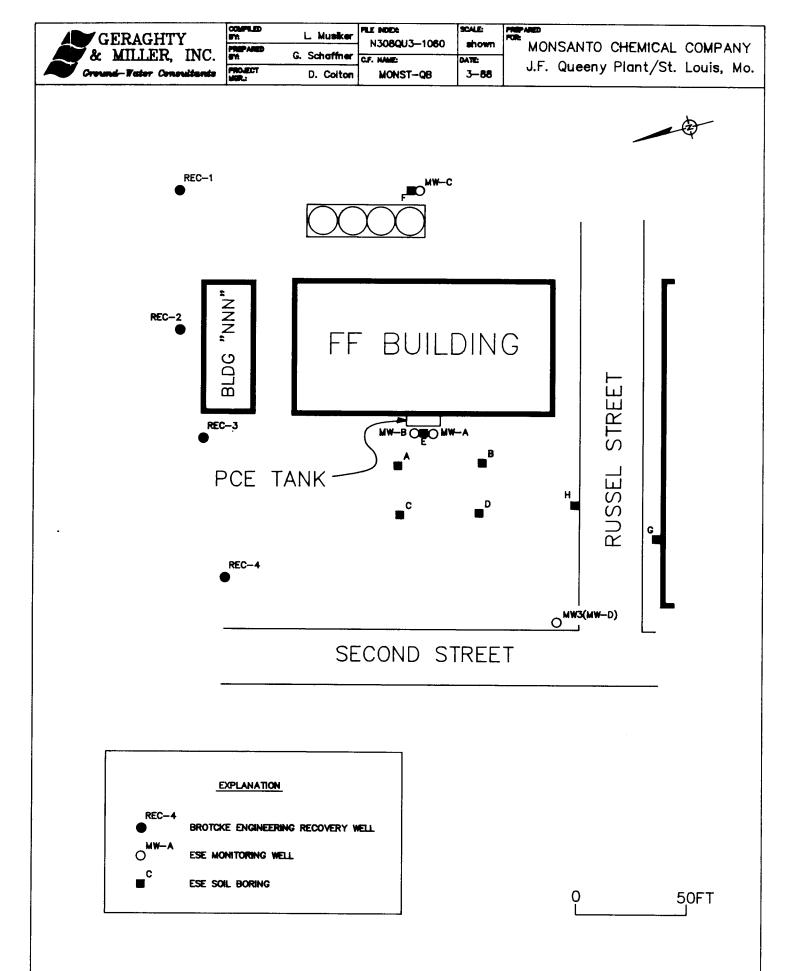


MW5 WELL DESIGNATION AND LOCATION

#.4 MEAN TOTAL BASE/NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS, MICROGRAMS PER LITER

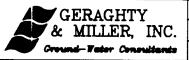
DISTRIBUTION OF MEAN TOTAL
BASE/NEUTRAL EXTRACTABLE
ORGANIC COMPOUNDS IN GROUND WATER

MONSANTO CHEMICAL COMPANY



SUBJECT:

SOIL BORING AND MONITORING WELL LOCATIONS IN THE VICINITY OF FF BUILDING



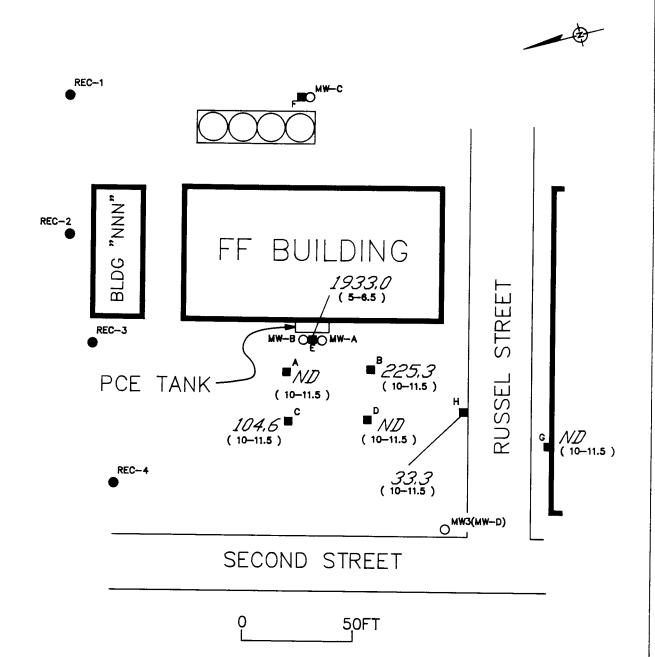
COMPLED BY:	L Musiker
PREPARED BY:	G. Schaffner
PROJECT MER.:	D. Colton

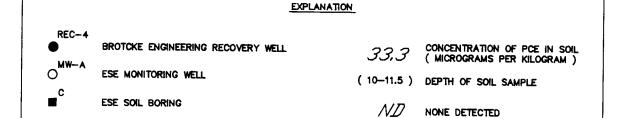
PLE NOID: N308QU3-1060 CF. NAME:

PCE-SOIL

scale shown DATE 3--88

MONSANTO CHEMICAL COMPANY
J.F. Queeny Plant/St. Louis, Mo.





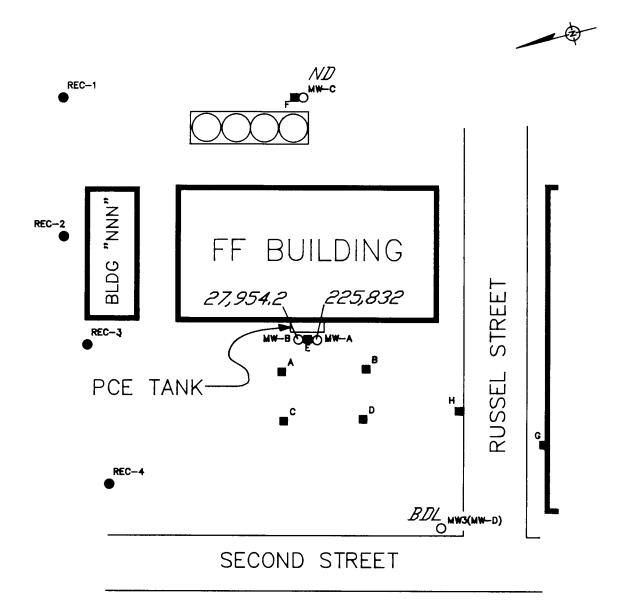
SUBJECT:



COMPLED	L. Musiker	FILE MOES
O II	L MUSIK	N308QL
PREPARED	C Cabatta	
5 73	G. Schaffner	C.F. NAME:
PROJECT	D. Colton	POF_

HOEDE	SCALE
308QU3-1060	shown
NAME:	DATE
PCE-CONC	3-88

MONSANTO CHEMICAL COMPANY J.F. Queeny Plant/St. Louis, Mo.



0 50FT

EXPLANATION

BROTCKE ENGINEERING RECOVERY WELL

ESE SOIL BORING

225,832

CONCENTRATIONS OF PCE IN GROUND WATER (MICROGRAMS PER LITER)

ESE MONITORING WELL

ND

NONE DETECTED

BDL

BELOW DETECTION LIMIT

SUBJECT:

CONCENTRATION OF PCE IN GROUND WATER

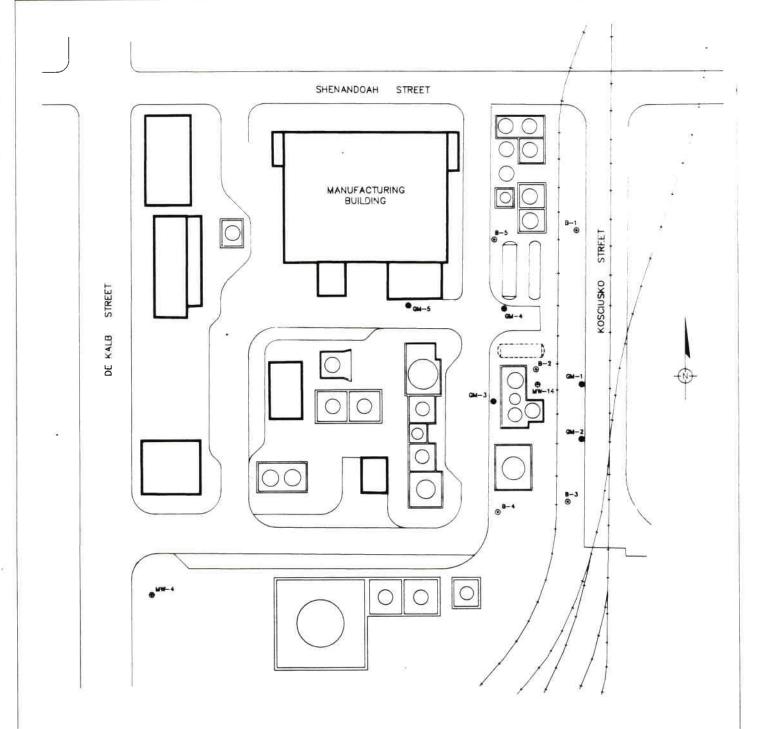
FIGURE



COMPILED BY:		B.A.	Blum	DATE: 9-87	showr
PREPARED BY:		W.H.	Cicio	J 0.	Silowi
PROJECT MGR.:	N.	Vaikenburg		NO3080	QU3-106

MONSANTO CHEMICAL COMPANY

J.F. Queeny Plant / St. Louis, Missouri



EXPLANATION

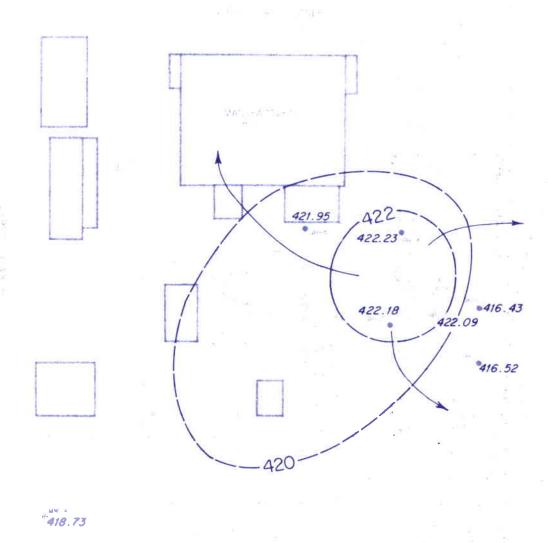
- . NEW MONITORING WELL LOCATION (INSTALLED 11/86)
- NEW SOIL BORING LOCATION (INSTALLED 11/86)
- EXISTING MONITORING WELL

50 FEET

SUBJECT:

SOIL BORING AND MONITORING WELL LOCATIONS IN THE VICINITY OF THE LASSO PRODUCTION AREA

N0308QU3-I060



TO METTERS WELL ALASS
 SHENG LOADS!

-420-LINE OF EQUAL WATER-LEVEL ELEVATION, IN FEET ABOVE MSL (DASHED WHERE INFERRED)

4 - JULY TORING WELL

GROUND-WATER FLOW DIRECTION

418.73 WATER-LEVEL ELEVATION



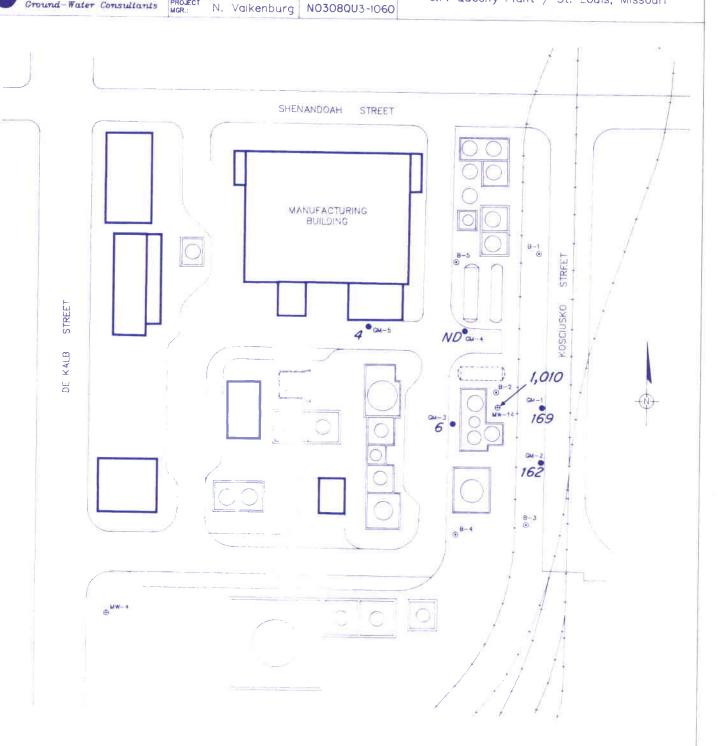
COMPILED B.A. Blum PATE: 9-87
PREPARED W.H. Cicio FILE NO:

DATE: SCALE:
9-87 Sho

shown PREPARED FOR:

MONSANTO CHEMICAL COMPANY

J.F. Queeny Plant / St. Louis, Missouri



EXPLANATION

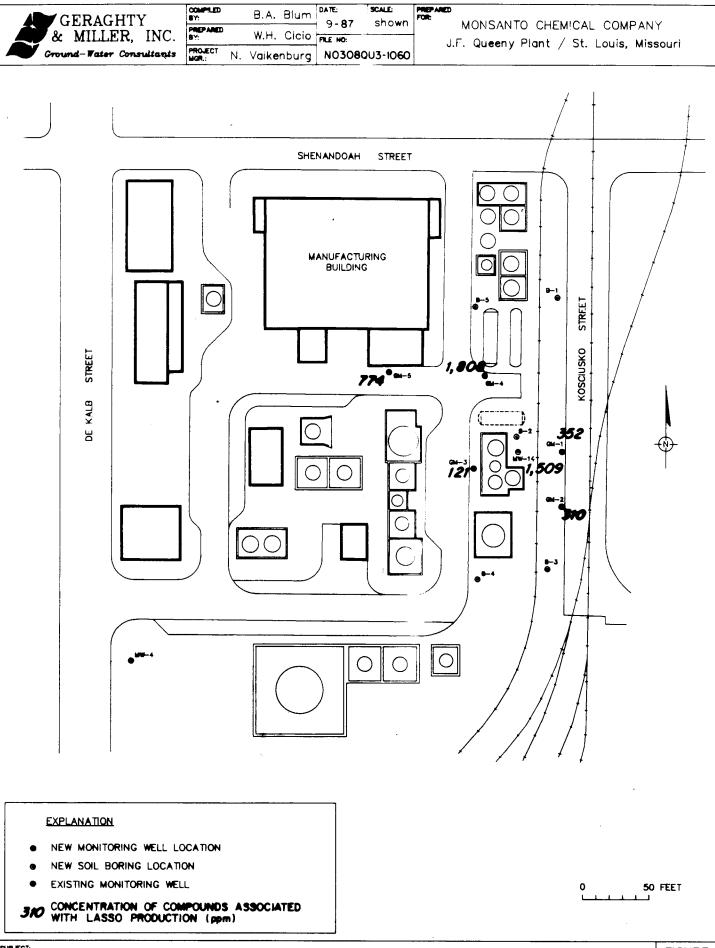
- . NEW MONITORING WELL LOCATION
- NEW SOIL BORING LOCATION
- # EXISTING MONITORING WELL

162 CONCENTRATION OF ALACHLOR (ppm)

0 50 FEET

SUBJECT:

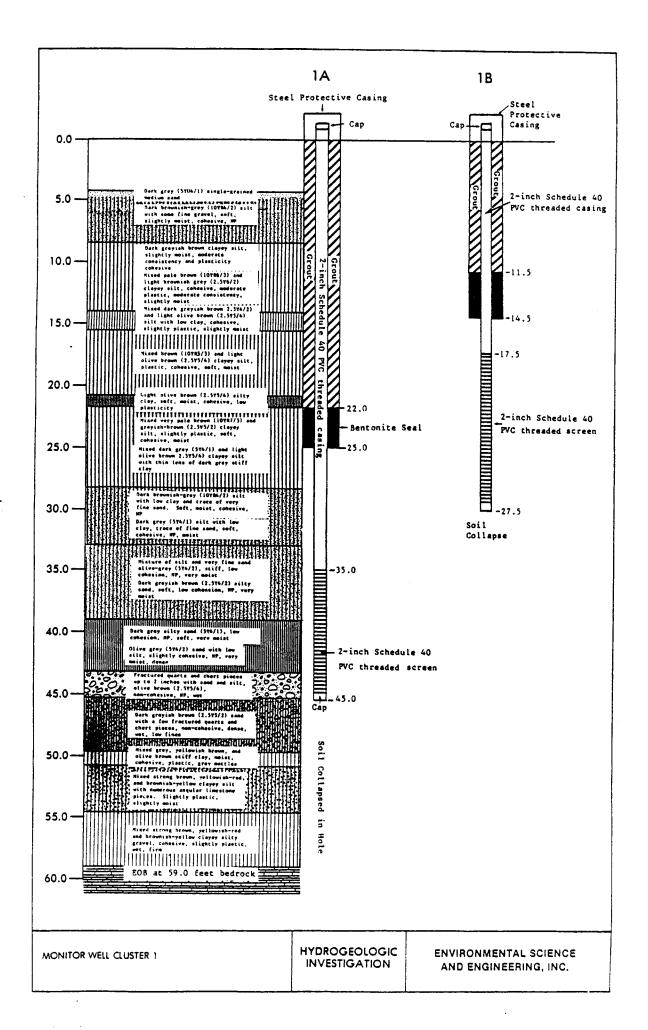
DISTRIBUTION OF ALACHLOR IN THE VICINITY OF THE LASSO PRODUCTION AREA - DECEMBER 1986

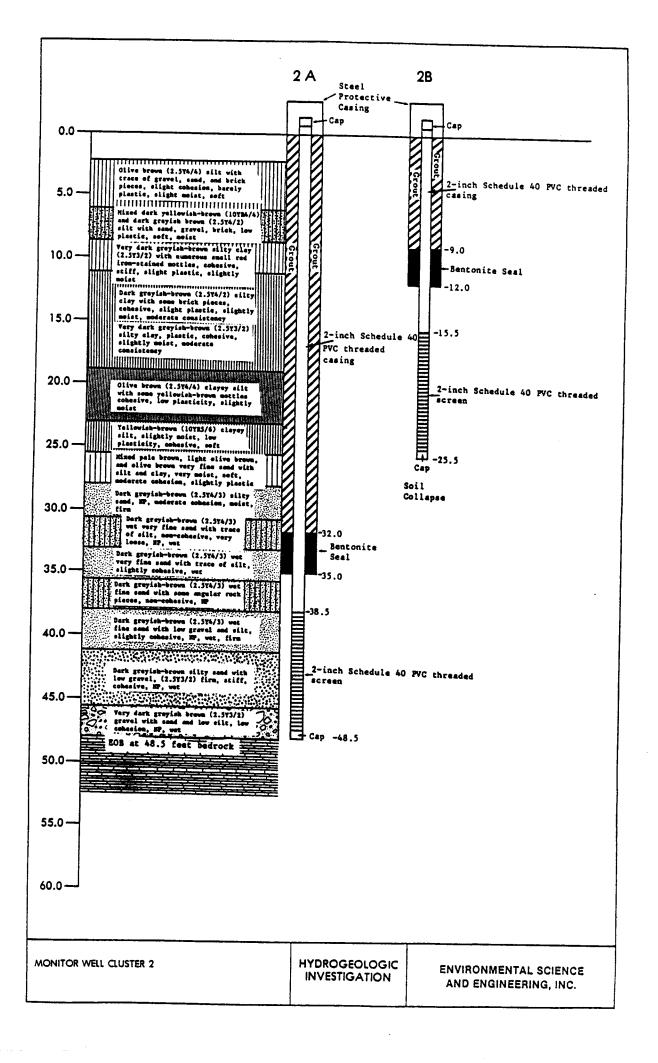


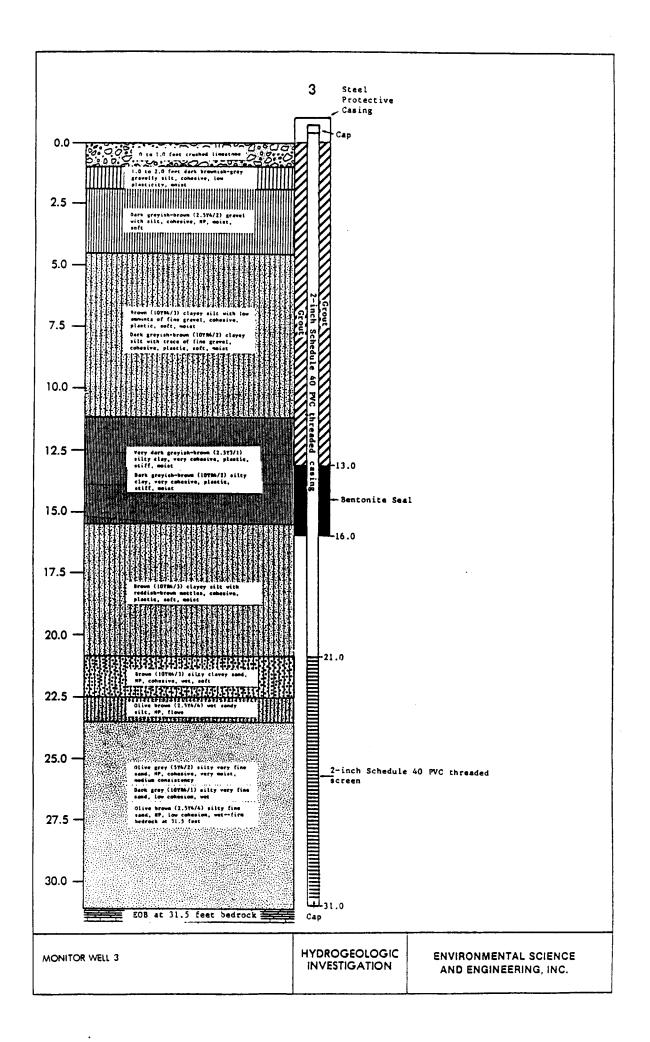
SUBJECT:

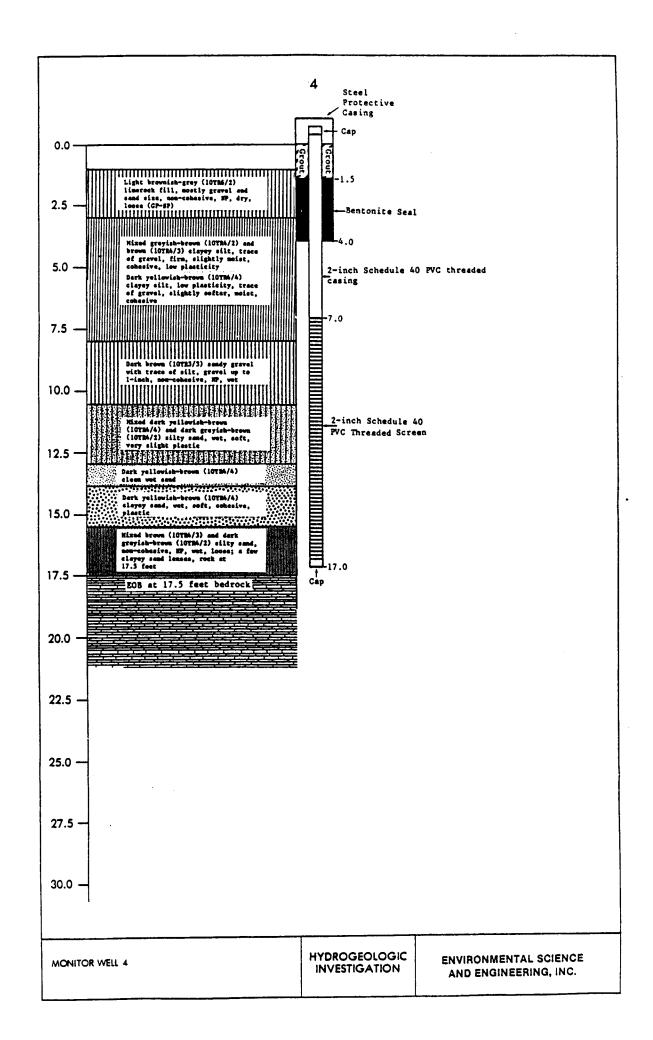
DISTRIBUTION OF COMPOUNDS ASSOCIATED WITH LASSO PRODUCTION-DECEMBER 1986

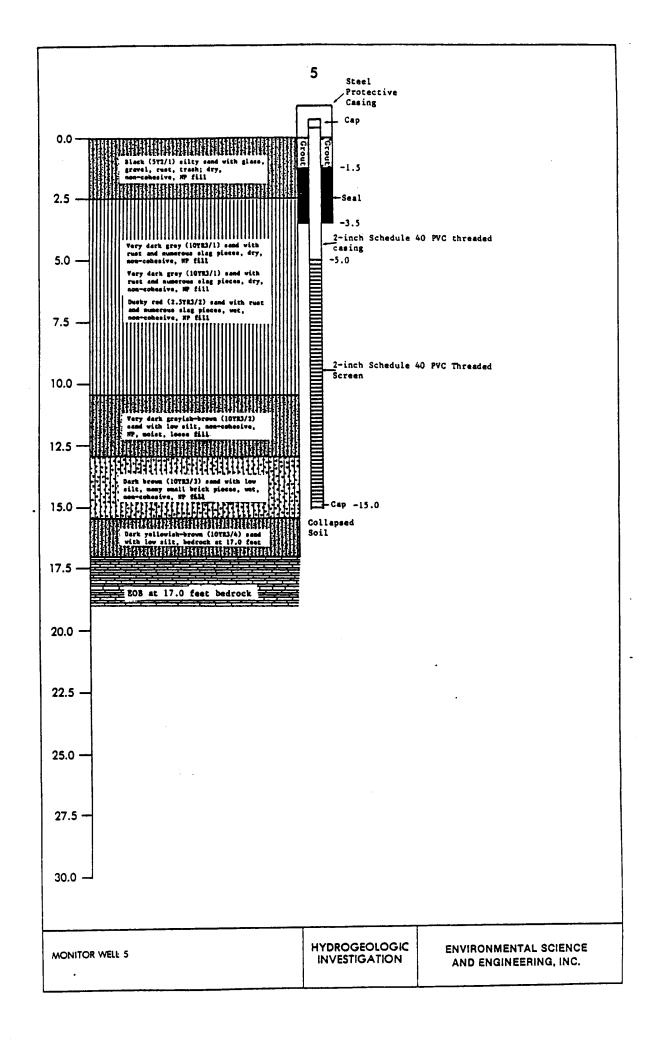
FIGURE

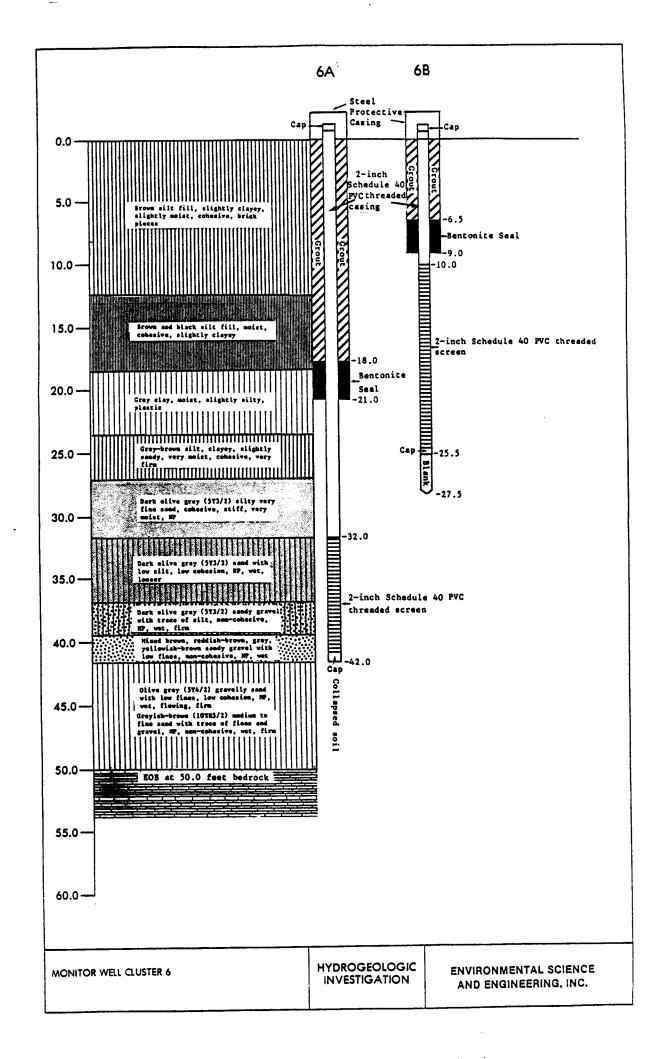


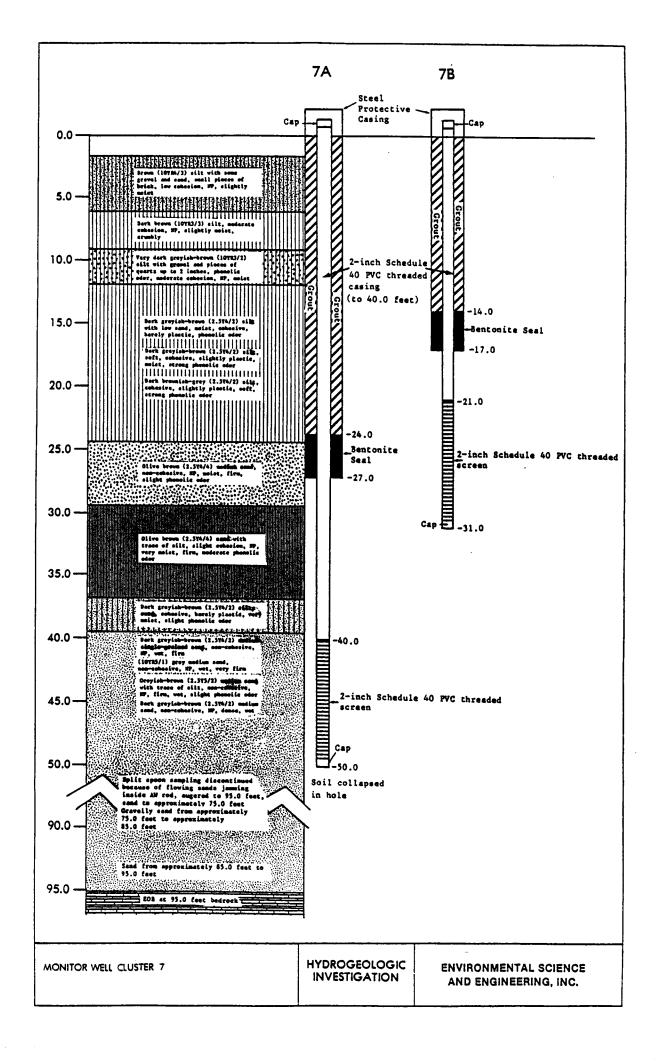


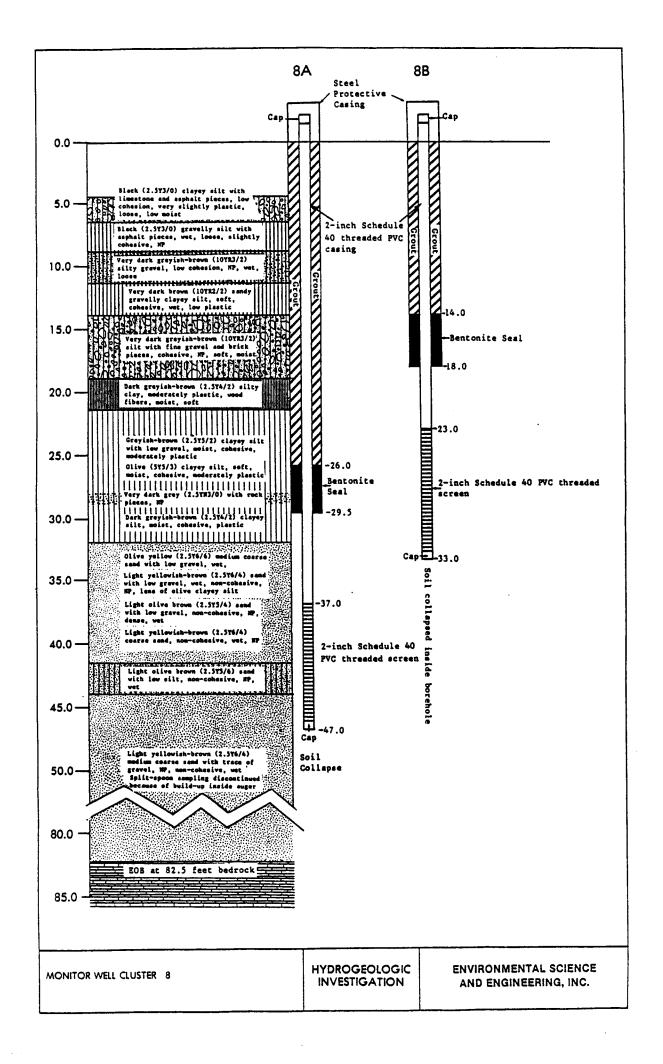


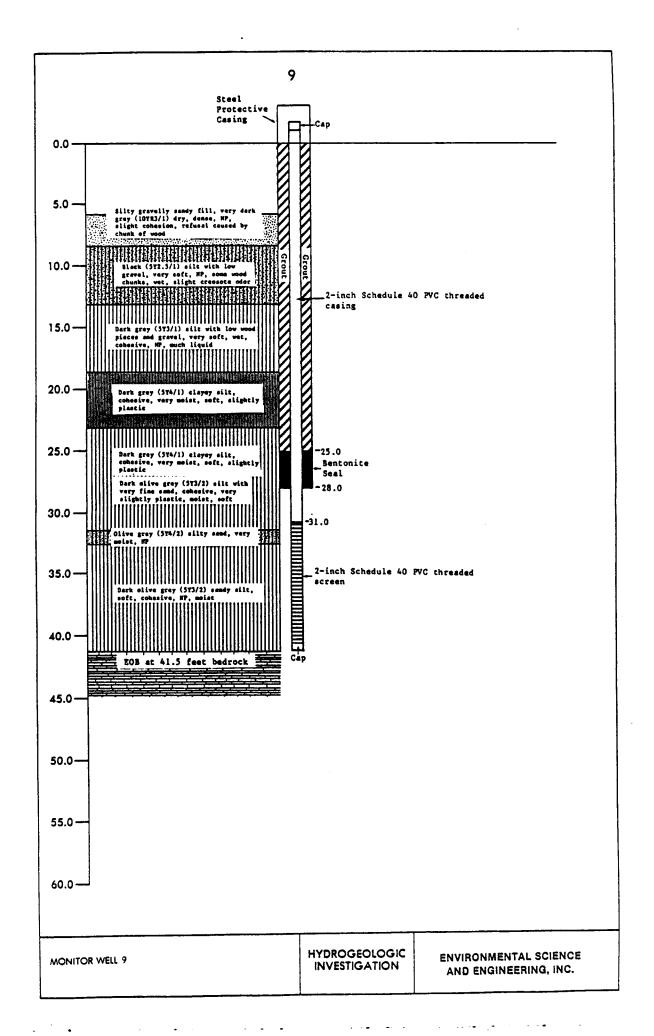


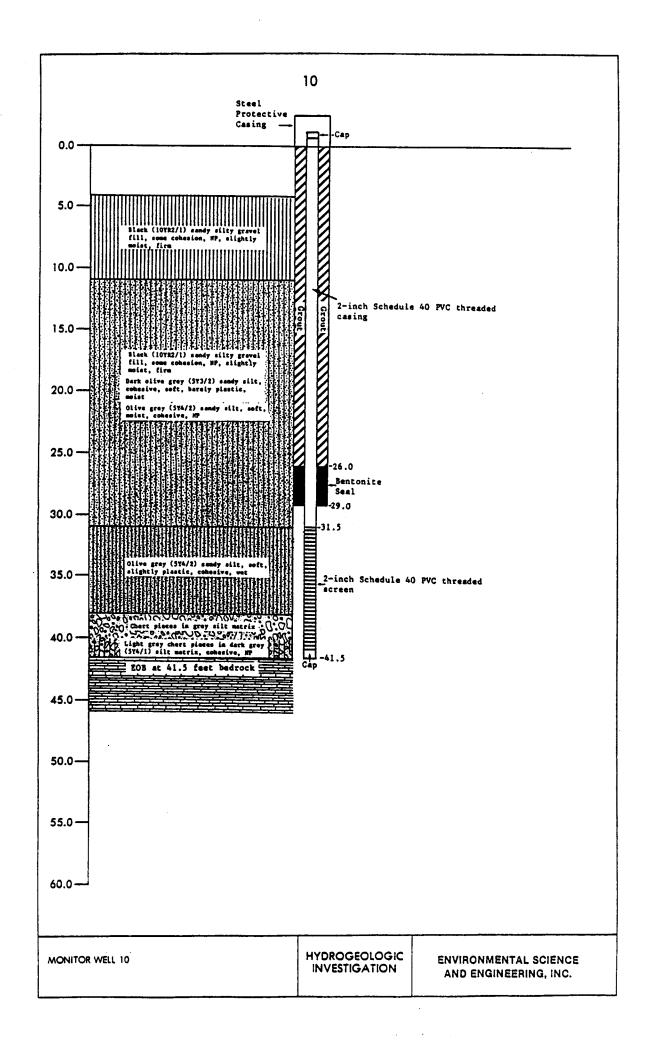


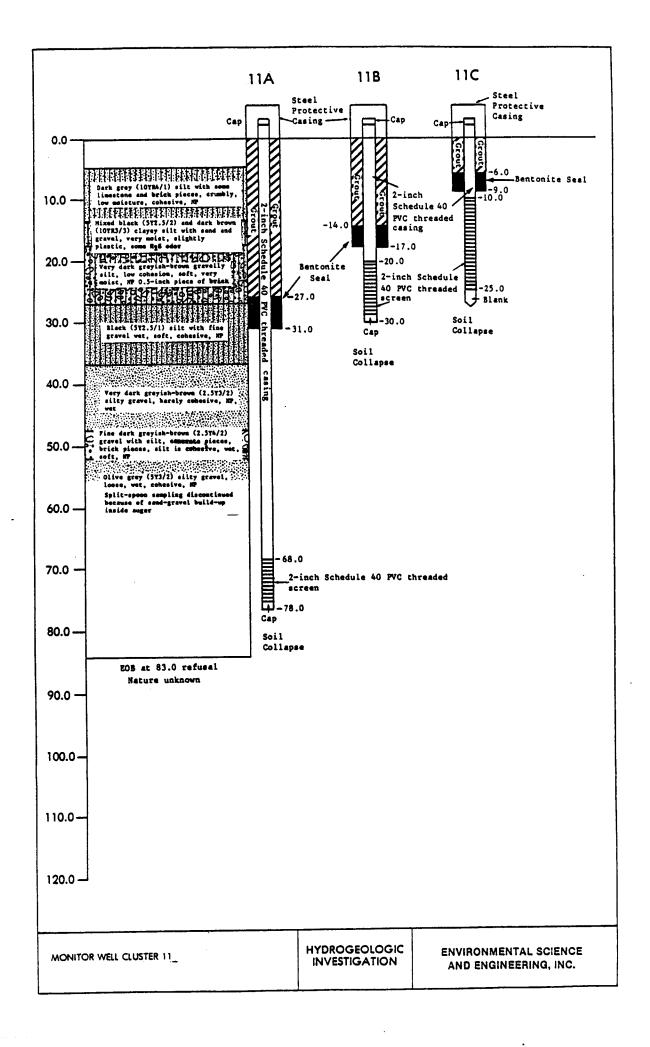


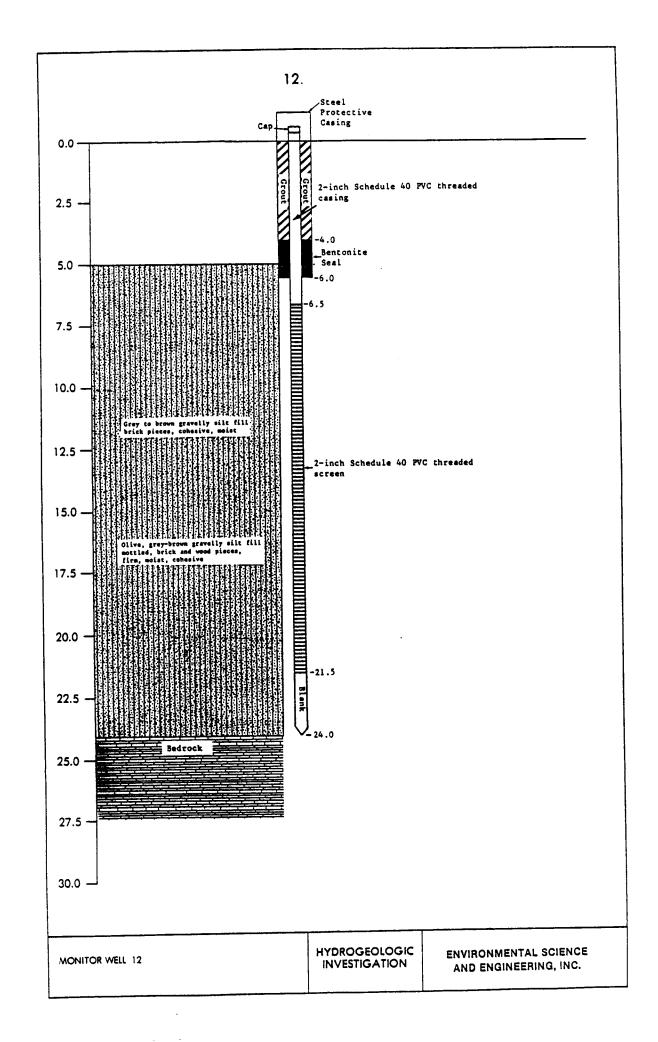


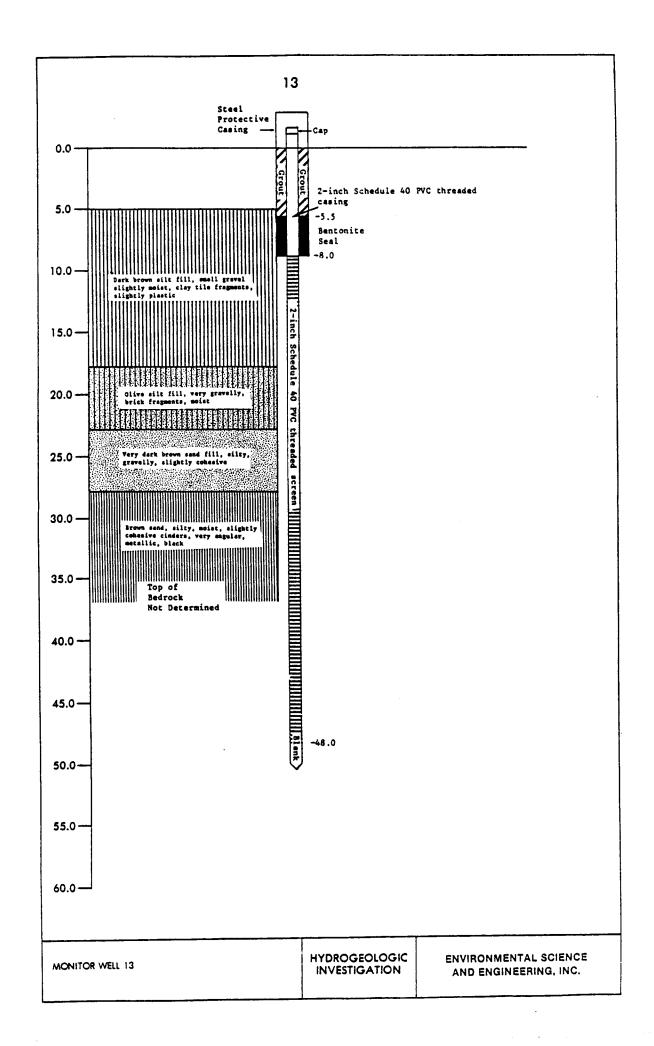


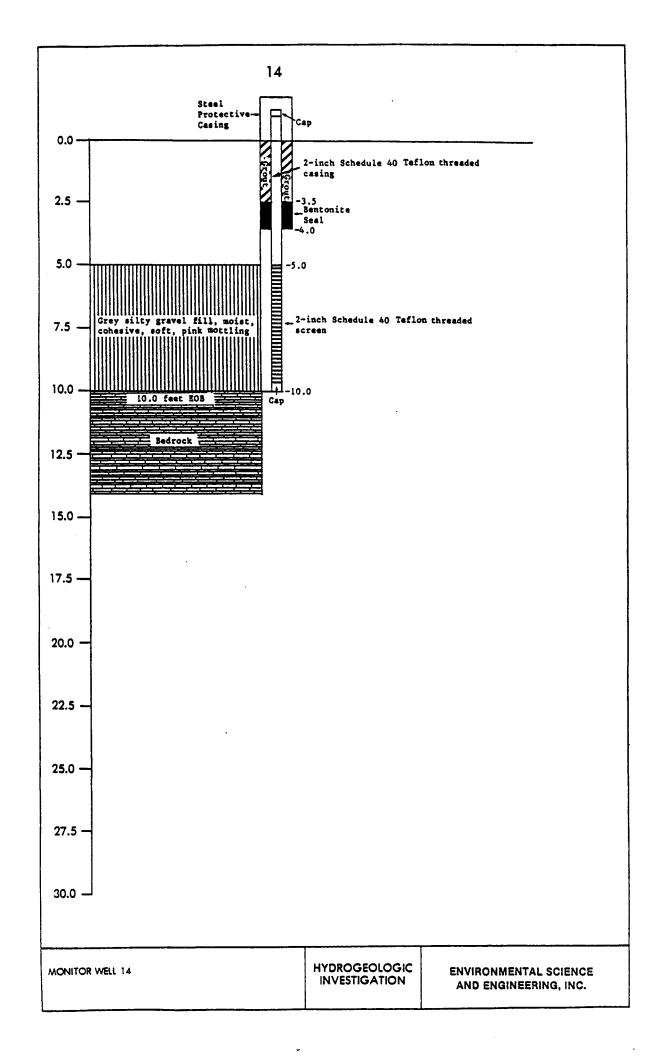


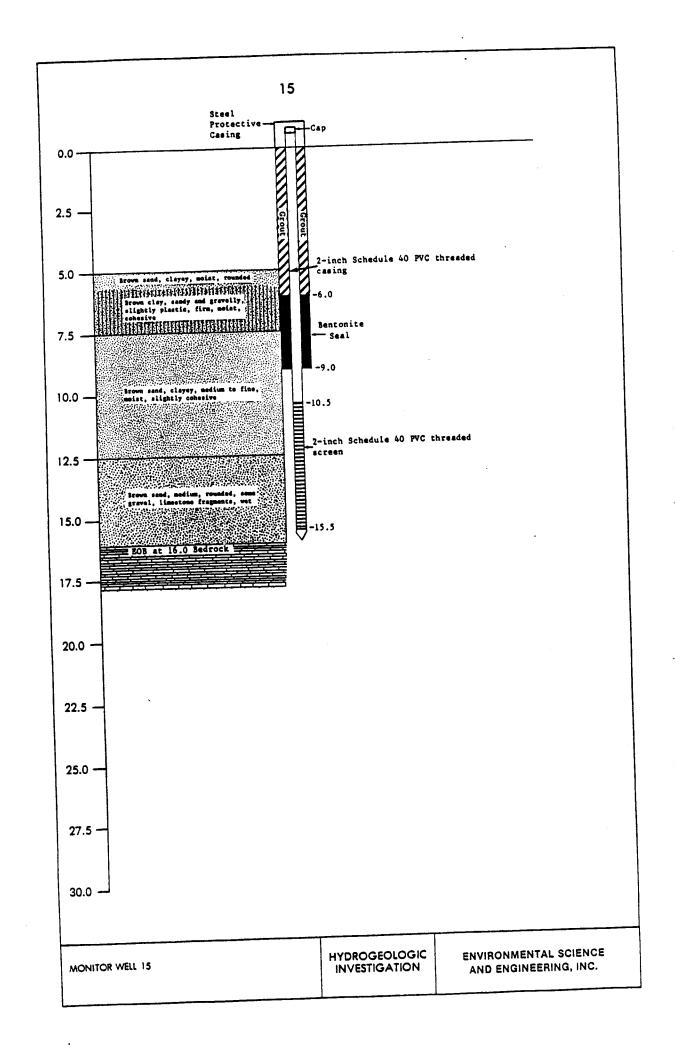


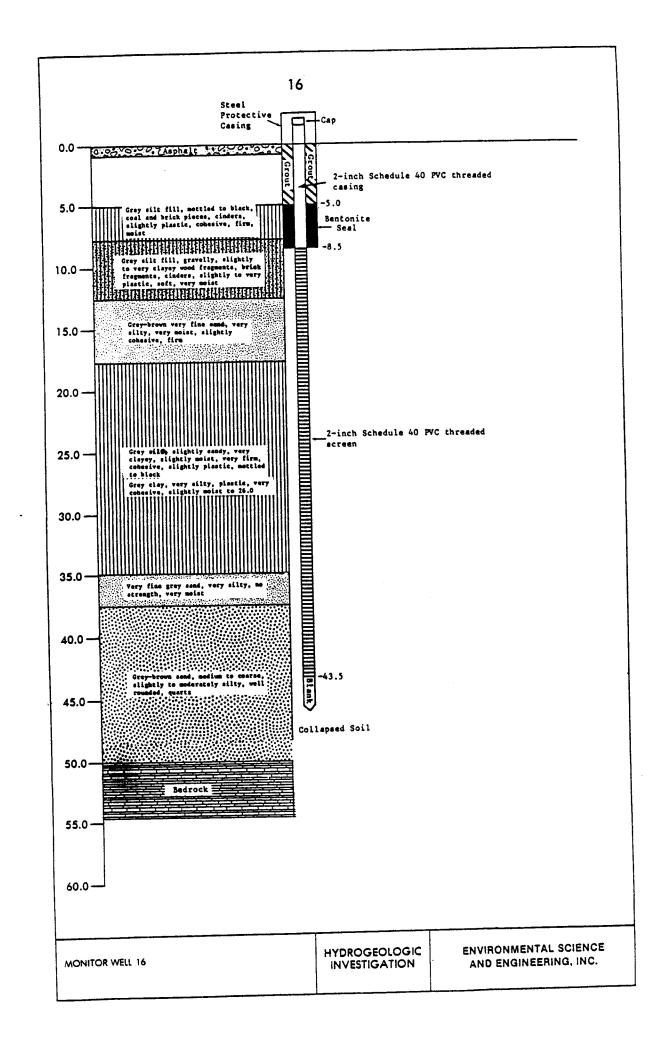


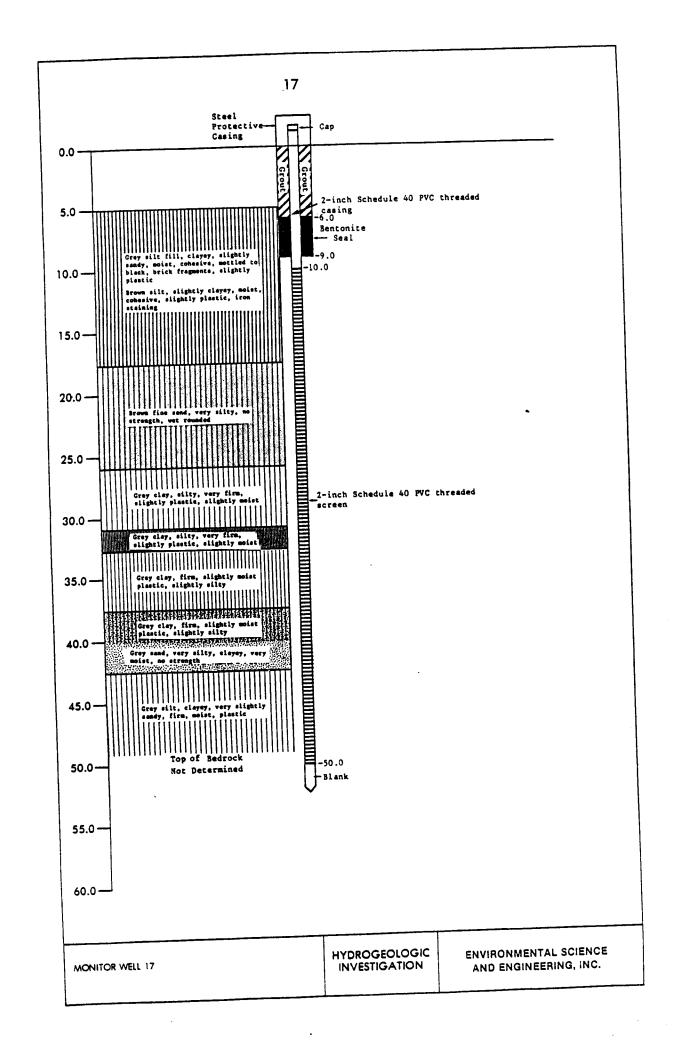


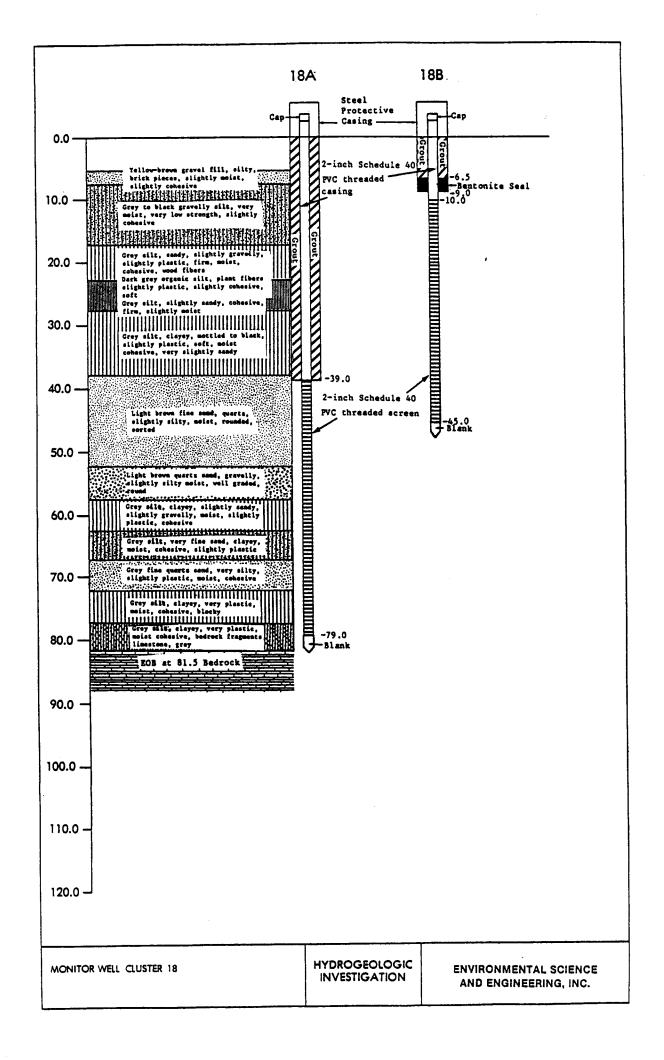


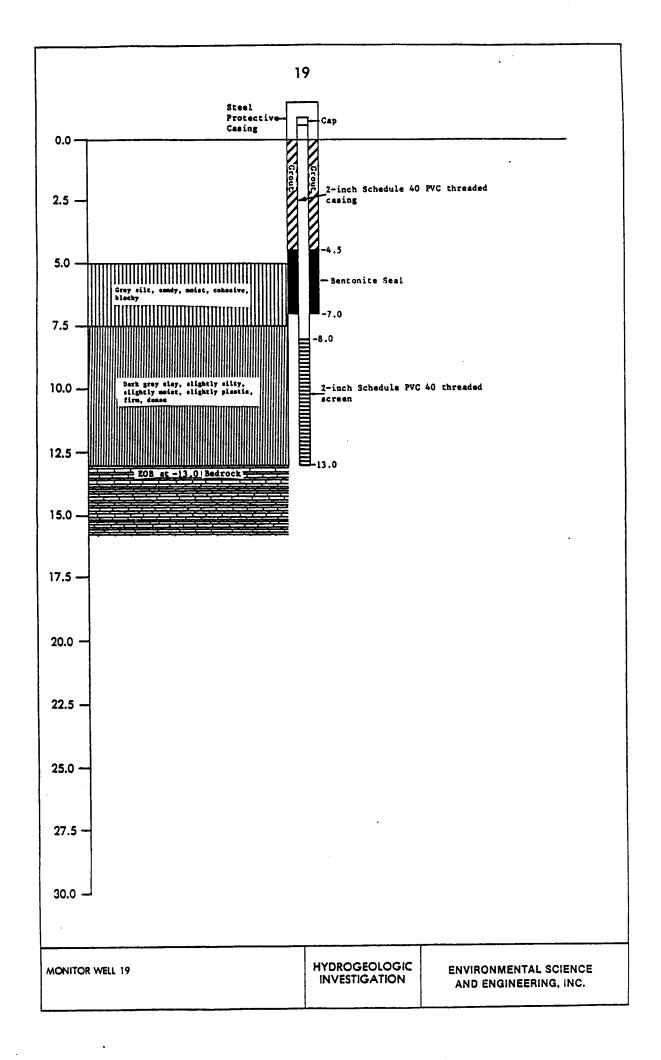


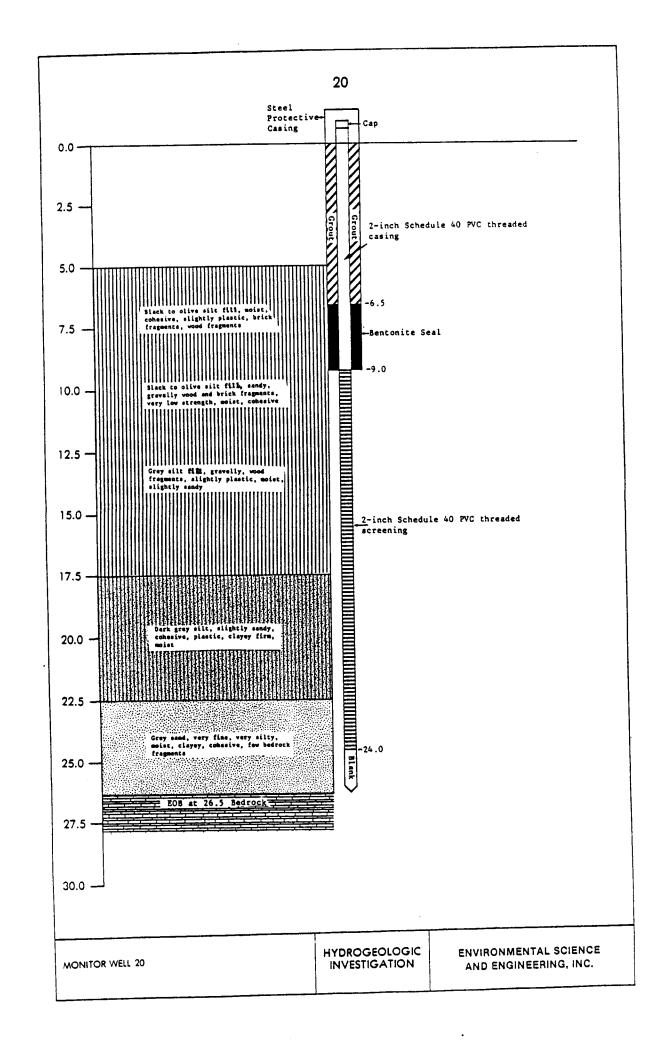












OMPLETION DEPTH

MATER LEVEL

PAGE _ OF _

	BOR	ING N	UMBER	<u>SB-4</u>	CLIENT	Mon	SANTE)
-	DAT	E DRI	LLED	5-6-85	PROJECT	OUE	FNY -	SUBSURFACE INVESTIGATION
	ELE'	OITAV	N		GEOLOGIST			
OLEPTH, FT.	SAMPLE	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND R		DEPTH, FT.	30L VAL	WELL SKETCH
0.0	-	 	 				⊃ {	
5 -								
5.0 -		55-A1	5 15" 5	GRAY CLAY FILL, BRICK PIECE SL. MOIST, CRUMBLY	ES, GRAVEL		CL	
1		55-A2	1 2 15" 4	GRAY CLAY, FIRM TO V. FI. COHESIVE, V. SL. PLASTIC, M	RM, SL. MOTILED 00. MOST		CL	
5 -		55-A3	1 18"	GRAY CLAY, MOTILED, V. FII SL. MOIST, SL. SILTY NON PLI COHESIVE	em, HARO ASTIC		CL	
×0 -		55-A4	1 3 18" 4	GRAY SILTY CLAY, FIRM, HAR COHESIVE, MOTILED SL. PL	D MOD MOIST, 4STK		دد	
A 5	7	Ss-A5	1 2 2 18"	GRAY CLAY, MOD SILTY, MED MOD_TOSL. PLASTIC, MOTILL COHESIVE	DIUM SOFT ED TO BLACK		CL-CH	
					-			
		DF DR		HOLLOW STEM AUGER	WELL DI			

WELL MATERIAL

WELL DEVELOPMENT _____

WATER LEVEL INITIAL _____FINAL _

HOLE DIAMETER

WATER LEVEL

COMPLETION DEPTH

PAGE _/ OF _/

	BOR	ING N	UMBER	<u> 58-8</u>	CLIENT	Mo	NSANT	ಬ		
	DAT	E DRI	LED	5-7-85	PROJECT	QUEE	NY -	SUBSURFACE	INVESTIGATION	
	ELE	OITAV	V		GEOLOGIST					
QUEPTH, FT.	SAMPLE	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND	REMARKS	ОЕРТН, FT.	USCS SYMBOL AND INTERVAL	WELL SKETCH	-	
5-									- - -	
30-		58-81	1 15	GRAY-BROWN CLAY, SL. SIL SL. MOIST, COHESIVE	_		CL		- -	
		se-82	1 18"	GRAY MOTILED CLAY, SL. SI. PLASTIC, SL. MOIST, COHES	CTY, SL. 10 MOD.		CL		- -	
75-									-	
		58-83	3 5 5	GRAY CLAY, AS ABOUE TO BROWN CLAY, FIRM, SLS COHESIVE NOW AASTIC	8.0' ILTY, SL. MOIST		CL			
O-		58-B 1	i 2 18" 3	BROWN CLAY, MOTILED, FI SC. MOIST, COHESIVE, SC. S	RM, STIFF ILTY SL PLASTIC	-	CL		- - -	
- Z.Ç.	}	68-8 <i>5</i>	۱ 2	MOTILED GRAY BROWN SILT WET -SATURATED, SL. PLA	ry clay Istic		ديا		- -	
_0 _						_			-	
:									- - -	
						- -			-	
									-	
_METI	НОД	OF DR	ILLING	HOLLOW STEM AUGE	æ WELL D	I AMFTI	= R			

WELL MATERIAL

WELL DEVELOPMENT

WATER LEVEL INITIAL _____FINAL ___

PAGE | OF |

		BORI	NG NU	IMBER :	58-C	CLIENT	Mon	SANT	0	
r		DATE	DRIL	LED .	5-7-85	PROJECT	QUE	ENY -	SUBSURFALE INVESTIGATION	İ
		ELEV	'ATION	! <u>.</u>	I	GEOLOGIST	KEN	M	EY <i>E</i> R	
	DEPTH, FT.	SAMPLE INTERVAL	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND R	EMARKS	ОЕРТН, FT.	USCS SYMBOL AND INTERVAL	WELL SKETCH	
	-25 -									
■	-5.0 -		58-C2	1 2 3 1 2 18" 3	BROWN CLAY FILL, SL. PLASTI SL. SILTY, COHESIVE BROWN MOTICEO CLAY, SC, M COHESIVE, SL. PLASTIC.	,		CL		
	-7.5 -		SB-C3	2 18"	CoHESIVE			CL		
•	12.5	•	5B-C4	4	GRAY-BROWN MOTILED CLAY SL. PLASTIC, COHESIVE			CL		
	.15.0 _		5B-US	3 3	GRAY SILT, VERY CLAYEY, F COHESIVE SATURATED	CLASTIC,				
- - - - - -										
	HOL COM	E DI	AMETE ION D	R	G HOLLOW STEM AUGER	WELL M	ATERI EVELO	AL PMENT	T	

PAGE ____ OF ___

-	BORI	NG NU	MBER .	<u> 58-D</u>	CLIENT	Mo	NSAN	ΤΟ	<u> </u>	
- -	DATE	DRIL	LED .	5-7-85	PROJECT	QUEE	vy - S	UBSURFACE	INVESTIGATION	
1		'ATION			GEOLOGIST					
DEPTH, FT.	SAMPLE	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND R	EMARKS	DEPTH, FT.	USCS SYMBOL AND INTERVAL	WELL SKETCH	-	
-25										
		SB-DI	1 1 15" 3	DARK GRAY CLAY, SL SILTY, SL MOIST, SL PLASTIC	FIRM, COHESIVE		CL			
-50		SB-02	। । 18" २	DARKGRAY CLAY, SL. SILTY, FIRM, SL. MOIST	SL. GRUMBLY,		CL			
-7.5		S8-03	 15" 3	DARK GRAY AS A BOVE TO 8.0 BROWN MOTILED CLAY, FIRM SL. PLASTIC, COHESIVE	, St. MOIST	-	CL			
-10.0	Y	56-04	1 1 16" 3	BROWN MOTILED SILTY CLA SL. PLASTIC, COHESIVE	Y, MOIST	-	CL			
-125	-									
					: 	- -				
COL	LE DI MPLET	OF DR AMETE ION D	R	G HOLLOW STEM AUGER 7" 11.5'	WELL M	ATERI EVELO	AL PMENT	 Г	FINAL	

PAGE 1 OF 2

	BORI	NG NUI	MBER S	B-E/MWA	CLIENT	MON	SANTO				· · · · · · · · · · · · · · · · · · ·	
-				5-11-85	PROJECT	QUE	NY -	Suasuaf	ACE.	I,	NESTIGATION	i
		ATION	-		GEOLOGIST	KEN	MEY	ER			·	
о Фертн, ft.	SAMPLE	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND RE	EMARKS	рертн, гт.	- n	WELL SKETCH				
		_						{				
25.									E			
		SB-E1	1 18"	BROWN -GRAY CLAY, FIRM COHESIVE SC. SILTY, SI	1, SL. PLASTC 4. MOIST		CL					
-5.0		58- <i>E</i> 2	7 - 18" 2	BROWN - GRAY CLAY AS AC	SOVE		CL					
-7.5		S8-€3	2 18" 3	BROWN - GRAY WAY AS AS	30√€		CL		GROUT		GROUT	
<i>- (</i> 0.0 ·		58- <i>E</i> 4	1 3 18" 4	BROWN GRAY CLAY AS ABOVE DARK BROWN SILTY CLAY, CRU			CL			RISER		
-12.5	5	58- <i>ES</i>	1 18"	DARK GAAY CLAYEY SILT, MOI COHESIVE	IST PLASTIC		mH					
-15.0		5B-E4	3 18"	GRAY CLAYEY SILT AS ABO LT. BAOWN CLAYEY SILT,	OUE TO 160°		mL		BENTON ITE	2" TEFLON	SEAL	
17.5			1	BROWN CLAYET SILT, MOTILED, WORM TUBES COHESIVE S	SLISANDY		mL		8			
-20.0		SB-67	2 10	WORM TUBES, COHENCE 3	, , , , , , , , , , , , , , , , , , ,		1 1 1		SAND		A A A A	
	1	l	L			<u></u>	.l	И	<u> </u>	• • • • • • • • • • • • • • • • • • • •	1	
_ H0	LE D	OF DE IAMETE ION I LEVEL	ER	G HOLLOW STEM HUGO 7" 30.0'	WELL I WELL MELL I WELL I WATER	MATER: DEVELO	I AL OPMEN	T Sug		»_ + F		

PAGE 2 OF 2

BORING NUMBER	SBE / MWA CLIENT	MONSANTO	
DATE DRILLED	PROJECT	QUEENY - SUBSURA	ALE INVESTIGATION
ELEVATION	GEOLOGIST	KEN METER	·
SAMPLE INTERVAL SAMPLE # AND TYPE BLOWS PER 6 INCHES	DESCRIPTION AND REMARKS	USCS SYMBOL AND INTERVAL AND INTERVAL HOLING	
SB-€8 18"	Lt. Brown , V.SILTY, V. FINE SAND STRATIFIED, I RONSTAINING, WELL SORTE	sm	SCACEN 2" RISER
-20.5 SB-€9 3 18"	LT. BROWN V. SILTY FINE SAND, STRATIFIED, IRON STAINING, SL.CLAYEY SORTED		ONO FACTOR! SCOTTED S
-27.5 SB-€10 \$18"	LT. BROWN SILTY FINE SAND, TURNING GRAY, HARD, STRATIFIED	Sm	Tefton OAC
SB-€11 6 18"		<u>-</u> 5ω	
	BEDROCK		
METHOD OF DRILLIN HOLE DIAMETER COMPLETION DEPTH	7" WELL M. 30.0 WELL D	ATERIAL TEF	2" CON EINAL

COMPLETION DEPTH

WATER LEVEL

PAGE _/_ OF _/_

	BORI	NG NU	MBER .	MW B	CLIENT	Mor	SANT	·0	
-	DATE	DRIL	LED .	5-10-85	PROJECT	<u> Ου ε ε</u>	NY - 3	SUBSURFACE IN	I UESTIGATIDA
	ELEV	ATION			GEOLOGIST	KEN		y GR	
рертн, гт.	SAMPLE	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND R	EMARKS	OEPTH, FT.	USCS SYMBOL AND INTERVAL	WELL SKETCH	
				SEE DESCRIPTION I	FOR SB-E/				
-2.5						-2.5-		GROUT	2.5
-								Bertavité EH 40 Tert.co.	
-5.0	-					- 5.0 -		Bertain Sc H 40	5.0.
-7.5	- - -					-7.5 -		EFM	7.5
								Recon SCREEN	
- 10.9						- 10.0 -		1	10.0
12.5						h c		SAND 0.010 FACTORY SWITED	
						-12.5-		SAND 0.010 F	12.5
-15.0						-15.0-			15.0
<u></u>								==	
17.5						-17.5 -			17.5.
=									
 ME	THOD	OF DR	ILLIN	G HOLLOW STEM AUGE	₩ELL D	IAMET	ER	_2"	
НО	LE DI	AMETE	R	7"	WELL MA			TEFLON	

WELL DEVELOPMENT SUERE + PUMP

WATER LEVEL INITIAL _____FINAL

PAGE OF

,	BORI	NG NU	MBER .	SA-F MWC	CLIENT	Mo	NSAL	TO			
-	DATE	DRIL	LED .	5-10-85	PROJECT	QUE	ENY-	- Sua Su	RFACE	E INVESTIGATIO	بلا
		'ATION			GEOLOGIS'	T KEN	J M	EYER	·		
DEPTH, FT.	SAMPLE	SAMPLE # AND TYPE	BLOWS PER 6 INCHES	DESCRIPTION AND RE	EMARKS	ОЕРТН, FT.	USCS SYMBOL AND INTERVAL	WELL SKETCH			-
-5.0 -)			WATER AT 0.5' GRAVEL FILL TO 7.0 BRICKS AND WOOD TO DRILLED TO 10.0 FIRST SAMPLE	0 7.5'	-2.5 - -5.0 -			2" SCH 40 PUC RISER		
- (D, 0) -		58-F4	3 8 1	GRAY CLAYEY SILT, MOIST, PLASTIC, COH ESIVE	SOFT	10.0 -	MH	·	PUC SCARTON		
		S8-F5	ا ا اکا ت	GRAY CLAYEY SICT, MOTILE PLASTIC, COHESIVE, SOFT	O TO BLACK		mH		SAND MORY SLOTTED		
_15.0 _		58-F6	1 15"	GRAY CLAYEY SIT, SL. MO SL SANDY, PLASTIC, CO SOPT	>π L€D oH€SIV€	15.0-	тн		0.000		
-17.5 -		S8- F7	0 1 18" 2	GRAY U.SILTY, UFINE SAND		-17.5-	ടന		2" SCH 40		
L-20.0 -					·	-20.0-	<u> </u>				
CON	E DI	AMETE	R	G HOLLOW Stem AUGER 7" 20'	WELL	DIAMET MATERI DEVELO LEVEL	AL PMENT	(FINAL	

WATER LEVEL

PAGE OF

BORING NUMBER	SB-G CLIENT	Monsanto
DATE DRILLED	5-14-85 PROJECT	QUEENY - SUB SURFACE INVESTIGATION
ELEVATION		KEN MEYER
SAMPLE INTERVAL SAMPLE # AND TYPE BLOWS PER	DESCRIPTION AND REMARKS	USCS SYMBOL AND INTERVAL HOLANS
-2.5 -		
58-G1 2 15 -5.0 - 58-G2 2 18	COOK C. OX C	CL =
7.5	GRAY CLAY AS ABOVE TO 8.5" GRAY MOTTLED CLAY, CRUMBLY SL. MOIST, SL. SILTY	CL
1 2	GRAY MOTICED CLAY, SC. CRUMBLY SC. PLASTIC, MOIST, SC. SILTY	
-12.5-		
METHOD OF DRILLI HOLE DIAMETER COMPLETION DEPTH		I AMETER ATERIAL EVELOPMENT

WATER LEVEL INITIAL _____FINAL ___

COMPLETION DEPTH

WATER LEVEL

PAGE _ OF _

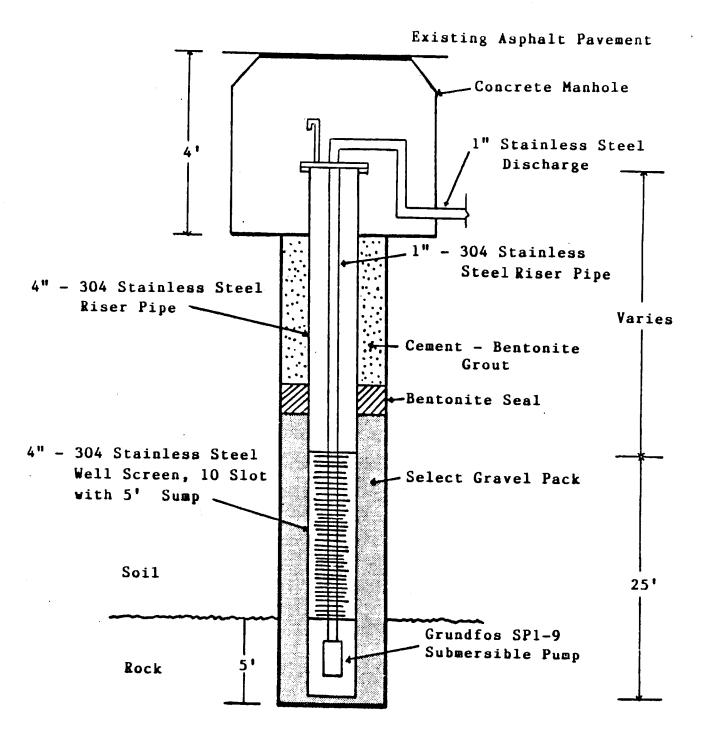
BORING NUMBER	SB-H CLIENT	MONSANTO
DATE DRILLED .	5-8-85 PROJECT	~
ELEVATION		T KEN MEYER
SAMPLE INTERVAL SAMPLE # AND TYPE BLOWS PER 6 INCHES	DESCRIPTION AND REMARKS	USCS SYMBOL AND INTERVAL HOLIAMS
SB-H1 4 15" -5.0 SB-H2 2 15" -7.5 SB-H3 4 17" 58-H3 4 17"	GRAY CLAY, SL MOTTLED, FIRM, COHESIVE V. SI. PLASTIC, MOIST GRAY CLAY, SL. MOTTLED, V. FIRM, SL SILTY COHESIVE, SL. MOIST GRAY CLAY AS ABOVE TO 8,5 GRAY MOTTLED CLAY, CRUMBLY SL. MOIST SL. SILTY GRAY MOTTLED CLAY SL CRUMBLY SL PLASTIC MOIST SL SILTY	C L
METHOD OF DRILLING HOLE DIAMETER	HOLLOW Stem AUGER WELL D	IAMETER

WELL MATERIAL

WELL DEVELOPMENT

WATER LEVEL INITIAL _____FINAL _





Typical PCE Recovery Well Monsanto - Queeny Plant St. Louis, Missouri



-Bering/V	Vell GM-	-1	Proiect/No.	Monsanto N0308QU2 Page 1 of 1
Site	St.	Loui	s, MO	Drilling 11/17/86 Drilling 11/18/86 Completed
Total De	oth Drille	ed 11.	75 feet	Hole Diameter 8 inches Coring Device Split Spoon
	•		2'/ 1½'	
Land-Su	rface Ele	ev		□ Surveyed □ Estimated Datum
Drilling F	luid Use	d	None	Drilling Method Hollow Stem Auger
Drilling Contract	or	John	Mathes, I	nc. <u>Driller David Gotto</u> Helper Brian Blum
Prepared By				Hammer 140 Hammer 30 inches
Sample/Collect below la	re Depth		Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.5	10-7-8-	Fill - chat and brown silt
		-	10	
2	4	1.5	7-7-8-10	Clay, gray and brown, dense
4	6	2.0	2-3-5-8	do
6	8	2.0	9-12-18-	do (wet)
			20	
8	10	2.0	8-9-10-	do
			11	
10	11	1.0	8-9	Clay, silty, gray and brown; trace fine sand
11	11.75	0.75	5-3	do
11.75				Bedrock
				·
		-		



WELL CONSTRUCTION LOG

.75 ft [4" Dia Protective Sleev	Project Monsanto N0308QU2	Well GM-1
-/2ft	LAND SURFACE	Town/City St. Louis	
	И	County St. Louis	
\mathcal{A}		Permit No.	
И	8 inch diameter	Land-Surface Elevation	
И	Crimed ribie	and Datumfeet	□ surveyed
И	Well casing,		estimated
	Stee I inch diameter,	Installation Dates(s) 11/17/18/86	
	D Backfill	Drilling Method Hollow Stem Auger	
И	Grout Pre-mix	Drilling Contractor John Mathes	
И	И	Drilling Fluid None	
И	4.5 ft*		
	Bentonite	Development Techniques(s) and Date(s)	
	5.5 ft. Dellets	Bailing 11/20/86	
			· · · · · · · · · · · · · · · · · · ·
	6,75 n •	Fluid Loss During Drilling None	gallons
		Water Removed During Development 7.5	gallons
	-Well Screen.	Static Depth to Water 5' below gr	
	2 inch diameter Stainless 10 slot	Pumping Depth to Water	feet below M.P.
	300	Pumping Duration hours	
	☐ Gravel Pack	Yieldgpm	Date
	□ Sand Pack	Specific Capacity gp	m/ft
	Formation Collapse	Well Purpose Monitoring	
	11.75n°		·
	n•	Remarks Bailed dry during dev	elopment
Mes	asuring Point is Top of		
	Il Casing Unless Otherwise		
Not	ed.		
*De	epth Below		
	and Surface	1	
		Prepared by Brian A. Blum	



Boring/\	Vell GM	- <u>2</u> F	Project/No.	Monsanto N03080U2 Page 1 of 1
Site	S	t. Lou	is. MO	Drilling 11/18/86 Drilling 11/18/86 Completed 11/18/86
Total De	epth Drille	9.	75 feet	Hole Diameter 8 inches Type of Sample/ Split Spoon Coring Device
	_			
				□ Surveyed □ Estimated Datum
	Fluid Use	d	N.	one Drilling Method Hollow Stem Auge
Drilling Contrac	tor	John M	lathes, In	c. Driller David Gotto Helper Culle D.
_				Hammer 140 Drop 30 inches
Sample/Co set below k	ore Depth and surface) To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.25	10-4-3-3	Fill - chat and brown silt
2	4	1.5	3-4-6-9	Fill - brown silt and fine sand (top 6") clay, gray
4	6	2	3-4-7-12	Clay, gray-brown; dense
6	8	2	13-14-	same as above
		 :	13-14	
8	10	0.15	2-4-5-8*	same as above; less dense
	9.75	,		Refusal
				•
				* Spoon bounces off solid surface after 3"
			<u> </u>	
				•
	·			
				·
	1	†		



WELL CONSTRUCTION LOG

4" dia protective sleeve	W	- 402090112		CM-3
t 🗍	Project Monsant		Well	GM-Z
LAND SURFACE	Town/CitySt.			
ИИ	County St.			MO
8 inch diameter	Permit No			
drilled hole	Land-Surface Eleva	ation		
Well easing	and Datum	feet	☐ surve	ryed
Well casing, 2 inch diameter, Steel			☐ estim	bets
Steel	Installation Dates(s)	11/18/86		· · · · · · · · · · · · · · · · · · ·
Backfill				
☐ Grout Pre-mix	Drilling Contractor	John Mathe	es	
ИИ	Drilling Fluid			
2.75 ft•				
Bentonite	Development Tech	nigues(s) and Da	te(s)	
3.75 ft* Dellets	Bailing _1	• • •	• •	
				· · · · · · · · · · · · · · · · · · ·
		None		
4.75 m·	Fluid Loss During D			gallons
-Well Screen. 2 inch diameter Stainless 10 slot Gravel Pack Sand Pack Formation Collapse 9.75				gallons
Well Screen. 2 inch diameter	•			feet below M.P.
Stainless 10 slot	Pumping Depth to \	Vater		feet below M.P.
	Pumping Duration		_ hours	
☐ Gravel Pack	Yield	gpm		Date
Sand Pack Formation	Specific Capacity	·····	gpm/ft	
Collapse	Well Purpose	Monitoring		
9				
9.75 h•		 		
n*	Remarks	Bailed dry d	uring develop	ment
suring Point is Top of				
ell Casing Unless Otherwise				
oted.				
Pepth Below				
Land Surface				
	Prepared by	, Brian A.	Blum	
	Prepared by		- T - T - T - T - T - T - T - T - T - T	



Boring/V	Vell <u>GM</u>	- 31	Project/No.	Monsanto N03080U2 Page 1 of 1
Site Location	s	t. Lou	is, MO	Drilling Drilling Started 11/18/86 Completed 11/19/86
Total De	pth Drilk	ed <u>9.</u>	5 feet	Hole Diameter8 inches Type of Sample/ Split Spoon Coring Device
cengin a	Device		2'/1½	Sampling Interval Continuous feet
				□ Surveyed □ Estimated Datum
Drilling F	Fluid Use	d	N	one Drilling Method Hollow Stem Auger
Drilling Contract	or	John M	lathes, In	c. <u>Driller David Gotto Helper Culle D.</u>
Prepared By	d Br	ian A.	Blum	Hammer 140 Drop 30 inches
Sample/Co pet below is From	re Depth ind surface) To	Core Recovery (feet)	Time/Hydrautic Pressure or Blows per 6 inches	Sample/Core Description
0	2	1.5	7-5-8-6	Fill; chat and brown silt grading to firm clay
2	4	2.0	7-9-11-	Clay, brown; firm (not as dense as previous borings)
	•		11	
4	6	2.0	2-4-6-8	Same as above, dense
6	8	2.0	12-13-	Same as above
			14-13	
8	10		4-5-7	Same as above
	9.5			Refusal
•				
			<u> </u>	
				·
	 			
				



Land Surface

WELL CONSTRUCTION LOG

4" Dia Protective Sleeve	
3 [⊤] ft ∏	Project Monsanto N0308QU2
LAND SURFACE	Town/City St. Louis
N N	County St. Louis
8 inch diameter	Permit No.
drilled hole	Land-Surface Elevation
Well casing,	and Datumfeet
Well casing, 2 inch diameter, Steel	
✓ Steel	Installation Dates(s) 11/18/
☐ Backfill ☐ Grout Pre-mix	Drilling Method Hollow S
TA Grout	Drilling Contractor John Ma
N N	Drilling Fluid None
2.5 n·	
Bentonite 🗆 slurry	Development Techniques(s) and
3.5 ft 🖾 pellets	Bailing 11/20/86
4.5m•	Fluid Loss During Drilling No
I	Water Removed During Developm
Well Screen.	Static Depth to Water 2' bel
2inch diameter Stainless10_slot	Pumping Depth to Water
Statilités To Side	Pumping Duration
☐ ☐ Gravel Pack	Yieldgpm
Sand Pack	Specific Capacity
Formation	Well Purpose Monitori
Collapse	
9.5 _{ft}	
n•	Remarks At first the bo
***	However, it filled in o
Measuring Point is Top of	development.
Well Casing Unless Otherwise Noted.	
, 10108.	
*Depth Below	

MO _____ State_ ☐ surveyed ☐ estimated /19/86 tem Auger thes Date(s) ne _ gallons 7.5 nent___ __ gailons ow ground _ feet below M.P. feet below M.P. ___ hours Date _____ _____ gpm/ft ng oring did not have water. overnight. Bailed dry during

Brian A. Blum

Prepared by _

_____ Well <u>GM-3</u>



Boring /V	Vell GM	1-4	Project/No.	Monsanto N03080U2 Page 1 of 1
Site	S	t. Lou	iis, MO	Drilling Drilling Drilling Completed 11/20/86
Total De	opth Drille	ed _ 9.	5 feet 2 1 / 1 ½	Hole Diameter inches
				□ Surveyed □ Estimated Datum
				one Drilling Method Hollow Stem Auge
				cDriller David Gotto Helper Culle D.
Prepare By	d Br	ian A.	Blum	Hammer 140 Hammer 30 inches
•	ore Depth and surface) To		Time/Hydraulic Pressure or	Sample/Core Description
0	3	-	-	Fill: Top 6" asphalt, chat, 6" concrete, heterogeneous
				mixture of sand and gravel
3	5	1	2-6-3-3	
5	7	2	4-6-10-	Clay, gray; dense
			12	
7	9	2	4-6-9-10	Same as above
9 ·	11	.5	9	Same as above
	9.5			Refusal
	 .			
	 			·
	-			



WELL CONSTRUCTION LOG

Curb		
Box	Project Monsanto N0308QU2	WellGM-4
-0.5ft LAND SURFACE	Town/City St. Louis	
	County St. Louis	State M0
8 inch diameter	Permit No.	
inch diameter drilled hole	Land-Surface Elevation	•
ИИ	and Datum feet	□ surveyed
Well casing, 2 Steel		☐ estimated
Steel	Installation Dates(s) 11/20/86	
☐ Backfill	Drilling Method Hollow Stem Au	
☑ Grout Pre-mix	Drilling Contractor John Mathes	
KI KI	Drilling Fluid None	
3 n·		<u> </u>
Bentonite slurry	Development Techniques(s) and Date(s)	
4 ft Dellets	<u>Bailing 11/20/86</u>	
<u>5</u> n•	Fluid Loss During Drilling None	
-Well Screen. 2 inch diameter Stainless 10 slot Gravel Pack Sand Pack Formation Collapse	Water Removed During Development	
Well Screen. 2inch diameter	Static Depth to Water 2 below	
Stainless 10 slot	Pumping Depth to Water	
	Pumping Duration ho	urs
☐ Gravel Pack	Yieldgpm	Date
Sand Pack	Specific Capacity	
Collapse	Well Purpose Monitoring	•
10 n°		
<u> </u>	Remarks	<u> </u>
		•
Measuring Point is Top of		
Well Casing Unless Otherwise		
Noted.		
*Depth Below		
Land Surface	Prepared by Brian A. Bl	
· ,	Prepared byBr(an A. B)	un



Borina /V	Vell GM	- 5	Project/No	Monsanto N03080U2 Page 1 of 1
Site	Si	t. Lou	is. MO	Drilling Drilling Started 11/21/86 Completed 11/21/86
Location Total De	oth Drille	ed 16	· 5 fee t	Hole Diameter8 inches Coring DeviceSplit Spoon
Length a	and Diam Device	neter	2'/1 1	Sampling Interval Cont i nuous feet
Land-Su	rface Ele	v	feet	□ Surveyed □ Estimated Datum
Drilling F	luid Use	d	- N	one Drilling Method Hollow Stem Auger
				C. Driller David Gotto Helper Culle D.
Prepared By	d Br	ian A	Blum	Hammer 140 Hammer 30 inches
Sample/Co est below la From	re Depth ind surface) To	Core Recovery (loct)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1		-	Asphalt and fill; gravel
1	3	1.5	4-5-7-9	Fill; sand, coarse and gravel, into clay, brown; to silt
3	5	2.0	10-7-7-	Clay, brown; with silt and moist
			9	·
5	7	2	4-7-7-7	Same as above
7	9 ;	2	8-11-3-	Same as above
			5	
9	11	2	9-10-7-	Clay, brown grading to silt
			8	
11	13 .		11-24-	Silt, brown moist grading to sand, medium to coarse
			7-13	
13	14	1	10-14	Sand, medium to coarse (65%), silt (35%)
16	16.5	0.5	2	Silt and clay, brown-gray
	16.5			Refusal
				·
				·
	1			



WELL CONSTRUCTION LOG

Curb			
-0.5 Box	ProjectMonsanto N0308QU2	Well	GM-5
ftLAND SURFACE	Town/City St. Louis		
KI KI	County St. Louis	State	МО
8 inch diameter	Permit No		
o inch diameter drilled hole	Land-Surface Elevation		
ИИ	and Datum feet	□ surveye	od .
Well casing, 2 inch diameter,		☐ estimat	ed
Stee)	Installation Dates(s) 11/21/86		
☐ Backfill	Drilling Method Hollow Stem Aug	er	
Grout Pre-mix	Drilling Contractor John Mathes		
ИИ	Drilling Fluid None		
4.5 m·			
Bentonite ☐ slurry	Development Techniques(s) and Date(s)		
5.5 ft* 🖾 pellets	Bailing	·	

6.5 m·	Fluid Loss During Drilling None		gallons
	Water Removed During Development		gallons
Well Screen. 2 inch diameter Stainless 10 slot Gravel Pack Sand Pack Formation Collapse	Static Depth to Water		feet below M.P.
2inch diameter Stainless10_slot	Pumping Depth to Water		feet below M.P.
	Pumping Duration hour	'S	
☐ ☐ ☐ Gravel Pack	Yieldgpm		Date
Sand Pack	Specific Capacity	pm/ft	
Collapse	Well Purpose Monitoring		
16 5			
16.5 _{ft} •			
n-	Remarks		
		<u></u>	
Measuring Point is Top of			
Well Casing Unless Otherwise			
Noted.		· · · · · ·	
*Depth Below			
Land Surface	1		
	Prepared by Brian A. Blur	n	



				Monsanto N03080U2 Page 1 of 1
Site Location	, s	t. Lou	is, MO	Drilling Started 11/18/86 Completed 11/18/86
Total De	epth Drille	ed		Hole Diameter8 inches Type of Sample/ Split Spoon
Land-Su	ırface Ele	ev	feet	☐ Surveyed ☐ Estimated Datum
				one Drilling Method Hollow Stem Auge
Contrac				Driller David Gotto Helper Culle D. Hammer 140 Drop 30 inches
	ore Depth and surface)		Time/Hydraulic Pressure or	Sample/Core Description
0	2	1.5	7-4-5-7	Fill: chat (pink discoloration) clay, brown
2	4	0.5	7-10-11-	
			13	
4	6	2.0	2-3-6-9	Clay, gray-brown; dense
6	8	2.0	16-15-	Same as above
			14-14	·
. 8	10	·2.0	3-5-7-7	Same as above; less dense, to silt
10	11	1.0	7-7	Same as above
			refusal	
	11		<u> </u>	Refusal
			ļ	·
			•	
		-		
	<u> </u>			
	-			



Borina/	Well_B-	2	Project/No.	Monsanto N0308QU2 Page 1 of 1
Site	S	t. lou	is. MO	Drilling Started 11/19/86 Completed 11/19/86
Locatio	n	-		Started
Total D	epth Drille	ed <u>9</u> .	.75 feet	Hole Diameter8 inches
Length of Corir	and Dian ng Device	neter ———	2'/1 1	Sampling Interval Continuous feet
Land-S	urface Ele	w	feet	□ Surveyed □ Estimated Datum
Drilling	Fluid Use	d	N	lone Drilling Method Hollow Stem Auge
Drilling Contract	ctor	John h	Mathes, In	Driller David Gotto Helper Culle D.
Prepare By	ed Br	ian A.	Blum	Hammer Hammer Orop 30 inches
	Cere Depth land surface) Te		Time/Hydraulic Pressure or	Sample/Core Description
0	2	1.5	8-10-13-	Fill: chat and sand, medium brown (pink discoloration)
-		1.,	8	Titt. Chac and Jana, may am Drewn (p.m. a.pasteration)
2	4	1.0	6-5-4-3	Same as above; bright pink-purple color
4	6	0	2-2-2-1	No recovery
6	8	0	7-4-3-2	No recovery in spoon: pulled center plug and had fill
	 		<u> </u>	coarse sand/gravel
88	10	9.75	3-9-10-	Fill: chat and sand; same as at top
		:	10*	
		9.75		Refusal
		-		•
				* 3" and Refusal
			<u> </u>	·
	+	 		



Boring/	В-	-3 F	Project/No.	Monsanto	N0308QU2	P	age1	_of
Site					Drilling Started 11/		ng pleted 11/	
Location	1 <u> </u>	t. Lou	is, MU		Started	Com		
					8 inches		Spire 3	
Length a of Coring	and Dian g Device		21/1211			Sampling Interv	/alCont	i uous feet
Land-Su	ırface Ele	3 V	feet	☐ Surveyed	□ Estimated	Datum		
Drilling f	Fluid Use	xd	None		<u>.</u> ,	Drilling Method	Hollow	Stem Auger
Drilling	tor			nc.	Driller	David Gotto	Helper C	ulle D.
Prepare By	d g		. Blum			Hammer 140 Weight	Hammer Drop	30 inches
Sample/Co lect below k	ore Depth and surface) To	Core Recevery (feet)	Time/Hydraulic Pressure or Blows per 6 inches		San	ngle/Core Description		
0	1	-	-	Chat and o	concrete			
1	3	1.25	3-1-2-4	Clay, blac	ck; dense			
3	5	2	3-4-6-9	Same as al	bove			
5	7	2	12-13-	Same as a	bove			
			14-17					
7	9	2	3-4-7-8	Same as a	bove			
9	11	-						
	9			Refusal				
	ļ							
								· · · · · · · · · · · · · · · · · · ·



Boring/	Well B	-4	Project/No.	Monsanto N0308QU2	Page _ 1 _ of _ 1
Site	_ S	t. Lou	is. MO	Drilling Started	11/20/86
Total D	epth Drille	ed <u>8</u> .	.75_ feet	lole Diameter8 inches	Type of Sample/ Split Spoon Coring Device Sampling Interval Continuous feet
	_				
				☐ Surveyed ☐ Estimated	
				_	Drilling Method Hollow Stem Auge
Contrac	ctor	John 1	lathes, In	·Drille	David Gotto Helper Culle D.
Prepare By	ed Br	ian A	. Blum		Hammer 140 Hammer 30 inches
	core Depth land surface) To		Time/Hydraulic Pressure or	\$	emple/Cere Description
0	1.75	.75	8-10-8-	Fill: chat and sand, m	edium light brown, spoon
			25	refusal at 1.75' (0.	
2	4	1.0	1-10-13	Clay, gray: wet	<i>y</i>
2	7	1.0	14	oray, gray. Wet	
4	6	2	5-3-6-9	Clay, gray: wet	
6	8		11-15-	Clay, gray: wet	
			14-16		
8	10		4-8	Same as above	
	8.75			Refusal	
	+				
	 		 		
					·
	-	-			



Boring/Y	Vell-<u>B</u>-5	<u> </u>	Project/No.	Monsanto N0308QU2 Page 1 of 1
Site Location	s	t. Lou	is, MO	Drilling 11/21/86 Drilling 11/21/86 Completed 11/21/86
	-		5 feet 2 1 / 1 ½	Hole Diameter 8 inches Coring Device Split Spoon Sampling Interval Continuous feet
•	=		feet	
			N	
D 200				cDriller_David Gotto_Helper_Culle D.
_	Hammer 140 Hammer 30 inches			
	ore Depth and surface) To		Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description
0	1	-	-	Asphalt top 6" fill; chat and gravel
1	3	0.25	4-5-5-6	Silt, brown with pink discoloration
3	5	1.25	6-4-5-8	Sand, medium (50%), silt (50%) grading to clay; gray
5	7	2	10-11-	Sand, medium to coarse, gray grading to clay, gray
-			13-16	
7	9	-	7-9-10-	No sample
			15	
9	11	2	6-8-12-	Clay, brown; with silt
			14	
11	13		8-11-14	Same as above
	12.5	ļ 		Refusal
				·
<u> </u>				